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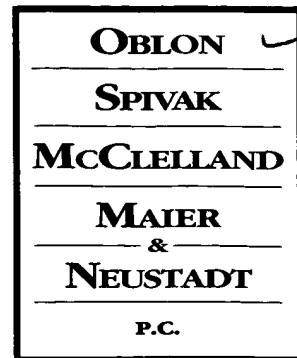
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IFW 8871751



Docket No.: 210356US0

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/903,769  
Applicants: Laurence SEBILLOTTE-ARNAUD, et al.  
Filing Date: July 13, 2001  
For: COSMETIC CLEANING COMPOSITION  
Group Art Unit: 1751  
Examiner: B. Mruk

ATTORNEYS AT LAW

RICHARD L. TREANOR  
(703) 412-6007  
RTREANOR@OBLON.COM

JEFFREY B. MCINTYRE  
(703) 413-3000  
JMCINTYRE@OBLON.COM  
\*BAR OTHER THAN VIRGINIA

SIR:

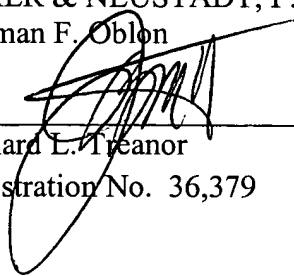
Attached hereto for filing are the following papers:

**APPEAL BRIEF w/APPENDIX (In Triplicate); and  
ATTACHMENT (Tabs A-C from the International Cosmetic  
Ingredient Dictionary and Handbook).**

Our credit card payment form in the amount of \$330.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
Richard L. Treanor  
Registration No. 36,379

Customer Number  
**22850**

(703) 413-3000 (phone)  
(703) 413-2220 (fax)

Jeffrey B. McIntyre  
Registration No. 36,867



Docket No. 210356US0

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

IN RE APPLICATION OF :  
Laurence SEBILLOTTE-ARNAUD, et al. : EXAMINER: B. MRUK  
SERIAL NO: 09/903,769 :  
FILED: JULY 13, 2001 : GROUP ART UNIT: 1751  
FOR: COSMETIC CLEANSING COMPOSITION

**APPEAL BRIEF**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Appellants submit this brief in response to the Final Rejection dated October 22,  
2003.

**REAL PARTY IN INTEREST**

The real party in interest herein is L'Oréal S.A. of Paris, France.

05/24/2004 JADD01 00000040 09903769

01 FC:1402 330.00 0P

**RELATED APPEALS AND INTERFERENCES**

Real party in interest L'Oréal S.A. filed an Appeal Brief in connection with U.S.  
patent application serial no. 09/903,785 on May 17, 2004. This application may be related to  
the present application.

### **STATUS OF CLAIMS**

Claims 1-4 and 6-29 are pending, although claims 17-20 have been withdrawn from consideration. Because withdrawn method claims 17-20 depend from claim 1, Appellants respectfully request that these claims be reinstated in the present application and considered on appeal.

### **STATUS OF AMENDMENTS**

All amendments and remarks filed in this case have been entered and considered.

### **SUMMARY OF INVENTION**

The invention relates to compositions containing, in a physiologically acceptable medium, (1) at least one foaming surfactant, (2) 1-15 % by weight of at least one hydrophobic silica, and (3) at least one oxyalkylenated compound. (Specification at page 3, lines 9-13 and page 5, line 2). In the invention compositions, the oxyalkylenated compound is a thickening agent. (Specification at page 3, lines 16-20). Furthermore, the invention compositions contain at least 35 % by weight of water. (Specification at page 4, lines 5-9).

The invention also relates to methods of using the invention compositions to cleanse skin and/or hair, to remove make-up, to treat greasy skin, and/or to disinfect skin. (Specification at page 20, line 17 through page 21, line 12).

**ISSUE**

1. Whether Claims 1-4, 6-13, 16, 21, 22, 23, 25 and 27-29 Are Anticipated By Uemura.
2. Whether The Pending Claims Are Obvious Over Glenn.

**GROUPING OF CLAIMS**

The claims do not stand or fall together. Each claim stands individually, and in the argument section provided below Appellants explain why the claims are each separately patentable, one from the other.

**ARGUMENT**

The invention compositions require the presence of (1) at least one foaming surfactant, (2) 1-15 % by weight of at least one hydrophobic silica, and (3) at least one oxyalkylenated compound. Together, these required compounds allow the preparation of foaming products having unique viscosity characteristics. Specifically, synergism between the hydrophobic silica and the oxyalkylenated compound allows the invention compositions to be unexpectedly and surprisingly thick.

As demonstrated in comparative examples 1 and 2 set forth on page 22 of the present specification, the presence of an oxyalkylenated compound yields a composition having a viscosity of 59 poises, while the presence of hydrophobic silica yields a composition having a viscosity of 1-100 centipoises. Based on the thickness of these compositions, one would

expect a composition having both of these compounds to have a viscosity of no more than 60 poises.

However, as demonstrated in invention example 1 on page 22, the invention composition having both of these compounds actually has a thickness of 97 poises, approximately 65% greater thickness than would have been expected based on the thickness of the individual comparative examples. Thus, the invention compositions represent an unexpected advance in the art.

Regarding the §102 rejection, Uemura's example 7 does not contain a hydrophobic silica or a foaming surfactant. Accordingly, this rejection is improper.

In an attempt to support the § 102 rejection, the Examiner relies upon the unsupported beliefs that the silica in Uemura's example 7 is inherently hydrophobic and that Appellants have the burden of proving that such silica is hydrophilic to overcome this rejection. These beliefs are wrong.

First, it cannot be assumed that the silica in Uemura's example 7 is hydrophobic. Silica is not inherently hydrophobic. Rather, it is generally hydrophilic (but can be modified so that it is hydrophobic).<sup>1</sup> Silica is usually desiccant. Because Uemura does not expressly state that the silica in his example 7 is modified so as to be hydrophobic, it does not necessarily follow that Uemura's silica is hydrophobic. Indeed, given that silica is hydrophilic unless modified, it is more likely that Uemura's silica is hydrophilic. Because it does not necessarily follow that the silica in Uemura's example 7 is hydrophobic, example 7

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<sup>1</sup> See, U.S. patents 5,843,407 (col. 5, lines 60-62) and 4,119,712 (col. 1, lines 39-42) submitted with Appellants' January 22, 2004, Request for Reconsideration.

does not inherently contain hydrophobic silica, making §102 rejection improper. *See, Eli Lilly & Co. v. Barr Laboratories, Inc.*, 251 F.3d 955 (Fed. Cir. 2001)(inherent anticipation requires that the claimed invention **necessarily result** from the prior art disclosure).

Second, to the extent Appellants have any burden of proof on this issue, it is not the burden of proving that example 7's silica is hydrophilic. Rather, Appellants need only demonstrate that the silica in example 7 is not **necessarily** hydrophobic (that is, that the silica is not inherently hydrophobic) to overcome the rejection. Appellants have satisfied this burden. The only evidence of record, which was submitted by Appellants,<sup>2</sup> demonstrates that silica is generally hydrophilic unless modified, and that Uemura does not indicate that example 7's silica has been modified in any way.

Similarly, the Examiner relies upon the mistaken belief that Uemura's example 7 contains a foaming surfactant to support the §102 rejection. However, the ethoxylated castor oil in example 7 is not a foaming surfactant.<sup>3</sup> The Examiner has not presented any evidence to the contrary. Moreover, the glycerol derivative in example 7 (1-hexyl-3-undecamethylhexasiloxane propynyl glycerol) is an "oil component" for combination with Uemura's polymers, not a foaming surfactant. (See, Uemura (B1 version) at page 3, line 57 through page 4, line 10). Again, the Examiner has not presented any evidence to the contrary,

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<sup>2</sup> See footnote 1.

<sup>3</sup> See Tab A which is the International Cosmetic Ingredient Dictionary and Handbook's entry for PEG-40 hydrogenated castor oil. The Dictionary identifies PEG-40 hydrogenated castor oil as an emulsifying surfactant, not a cleansing surfactant.

See also, Tabs B and C which are the Dictionary's listings for cleansing and emulsifying surfactants, respectively. Again, PEG-40 hydrogenated castor oil is identified as an emulsifying surfactant, not a cleansing surfactant.

Because foaming surfactants are cleansing surfactants, not emulsifying surfactants, it follows that PEG-40

only unsupported assertions. Thus, Uemura does not contain a foaming surfactant either, making the §102 rejection improper for this reason as well.

Regarding the §103 rejections based on the Glenn references (collectively referred to as "Glenn"), Glenn must motivate or suggest to one skilled in the art to combine all three required ingredients into a single composition for the invention compositions to be *prima facie* obvious under 35 U.S.C. §103. Glenn, however, does not provide the necessary suggestion or motivation. In particular, Glenn does not teach or suggest adding an oxyalkylenated **thickening agent** to his compositions. Accordingly, Glenn does not teach or suggest the invention compositions or methods.

Glenn does not disclose or suggest adding oxyalkylenated thickening agents to his compositions. For oxyalkylenated compounds to be thickening agents, they must have a substantial degree of oxyalkylation. (See, pages 6-12 of the present specification). Glenn neither teaches nor suggests such compounds. Rather, Glenn discloses oxyalkenylated compounds suitable for use in his compositions as humectants, solutes and surfactants. Given the purpose for which Glenn includes such compounds in his compositions, these compounds are not going to have a substantial degree of oxyalkylation, which means that they will not be thickening agents. This is particularly true in view of the fact that Glenn's compositions are liquid.

In support of the § 103 rejections, the Examiner asserts that Glenn's disclosing the use of polyethylene glycol as a humectant/solute discloses the use of polyethylene glycol as a thickening agent. This assertion overlooks the fact that the present application discloses the

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hydrogenated castor oil is not a foaming surfactant.



use of polyethylene glycols which are not thickening agents as humectants/solutes (see, page 19, line 12) as well as the use of different polyethylene glycols as thickening agents (see, page 7, line 10 et seq.). Clearly, polyethylene glycols which are not thickening agents differ from those which are thickening agents in the context of the present invention, so Glenn's disclosure of those which are not thickening agents cannot disclose or suggest the required thickening agents.

The significance of the requirement that the required oxyalkylenated compounds be thickening agents is demonstrated by the examples in the present specification. Comparative example 2 (page 22) does not contain PEG-120 methylglucose dioleate, an oxyalkylenated thickening agent, but it does contain two of Glenn's acceptable solutes/humectants, sorbitol and glycerol. (See, Glenn at col. 13, lines 14-15). This composition has a viscosity of 1-100 centipoises. Thus, compositions containing only Glenn's solutes/humectants result in unacceptable, non-viscous products. However, when thickening agent PEG-120 methylglucose dioleate is added, the resulting composition is substantially more viscous, having a viscosity of 97 poises. (Example 1, page 22). Thus, adding the claimed oxyalkylenated compound in a composition thickening effective amount results in a product having superior, more desirable properties, whereas adding Glenn's solutes/humectants does not.

Even assuming that a *prima facie* case of obviousness has been established – which is not the case – the unexpected viscosity properties associated with the invention compositions set out earlier in this argument are sufficient to rebut such a hypothetical case of *prima facie* obviousness.

In view of the above, Appellants respectfully submit that the present claims are in condition for allowance, and that the pending rejection should be REVERSED.

Each dependent claim similarly points out and describes a patentable invention neither disclosed nor suggested by the applied prior art. These claims themselves are separately patentable.

Claim 2 is a composition claim further requiring the presence of 35-95% water. Both Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, 1-15% hydrophobic silica, an oxyalkylenated compounds and 35-95% water, nor do they recognize or suggest any benefits associated with such compositions.

Claims 3 and 29, each separately patentable, are composition claims which further requires the composition to have specific viscosity properties. Nowhere does Uemura or Glenn describe or allude to compositions having such characteristics, or to any benefits resulting from a composition having such viscosity properties.

Claims 4 and 23-26, each separately patentable, further require the presence of specific amounts of hydrophobic silica. Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, the amounts of hydrophobic silica specified by these claims, and an oxyalkylenated compound, nor do they recognize or suggest any benefits associated with such compositions.

Claims 6 and 7, each separately patentable, are composition claims further requiring the presence of specific hydrophobic silicas. Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, the hydrophobic silicas specified in these claims,

and an oxyalkylenated compound, nor do they recognize or suggest any benefits associated with such compositions.

Claim 8 is a composition claim further requiring the presence of 1-20% oxyalkylenated compound. Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, a hydrophobic silica, and 1-20% oxyalkylenated compound, nor do they recognize or suggest any benefits associated with such compositions.

Claims 9-11, 22 and 27-28, each separately patentable, are composition claims requiring the presence of specific oxyalkylenated thickening compounds. Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, a hydrophobic silica, and the oxyalkylenated compounds specified in these claims, nor do they recognize or suggest any benefits associated with such compositions.

Claims 12, 14 and 15, each separately patentable, are composition claims further requiring the presence of specific surfactants. Uemura and Glenn neither teach nor suggest compositions having the foaming surfactants specified in the claims, a hydrophobic silica, and an oxyalkylenated compound, nor do they recognize or suggest any benefits associated with such compositions.

Claim 13 is a composition claim further requiring the presence of 2-50% foaming surfactant. Uemura and Glenn neither teach nor suggest compositions having 2-50% foaming surfactant, a hydrophobic silica, and an oxyalkylenated compound, nor do they recognize or suggest any benefits associated with such compositions.

Claim 16 is a composition claim further requiring the presence of specific solvents. Uemura and Glenn neither teach nor suggest compositions having a foaming surfactant, 1-

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Response to Final Rejection dated October 22, 2003

15% hydrophobic silica, an oxyalkylenated compound and the solvents specified in this claim, nor do they recognize or suggest any benefits associated with such compositions.

Claims 17-20, each separately patentable, are method claims further requiring use of the invention compositions to cleanse skin and/or hair, to remove make-up, to treat greasy skin, and/or to disinfect skin, respectively. Nowhere do Uemura or Glenn describe or allude to using compositions having a foaming surfactant, 1-15% hydrophobic silica, and an oxyalkylenated compound for such purposes, or to any benefits resulting from such use of such compositions.

Claim 21 is a composition claim which further requires the composition to be a face mask. Nowhere do Uemura and Glenn describe or allude to compositions having a foaming surfactant, 1-15% hydrophobic silica, and an oxyalkylenated compound applied as a face mask, or to any benefits resulting from such a face mask.

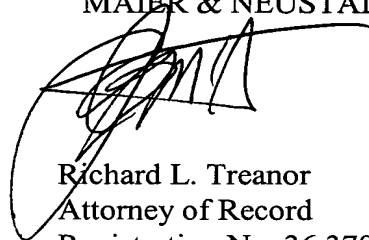
Application No. 09/903,769

Response to Final Rejection dated October 22, 2003

Accordingly, in view of the above remarks and reasons explaining the patentable distinctness of the presently appealed claims over the applied prior art, Appellants request that the Examiner's rejections all be REVERSED.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read 'R. Treanor', is written over the printed name and title of Richard L. Treanor.

Richard L. Treanor  
Attorney of Record  
Registration No. 36,379

Jeffrey B. McIntyre  
Registration No. 36,867

Customer Number

**22850**

Tel #: (703) 413-3000

Fax #: (703) 413-2220

## **APPENDIX**

Claim 1 (Previously Presented): A cleansing composition, comprising:

(1) at least one foaming surfactant, (2) at least one hydrophobic silica and (3) at least one oxyalkylenated compound thickening agent in a physiologically acceptable aqueous medium comprising at least 35% by weight of water relative to the total weight of the composition, wherein the amount of hydrophobic silica ranges from 1% to 15% on an active material weight basis relative to the total weight of the composition.

Claim 2 (Original): The composition of Claim 1, which comprises from 35% to 95% by weight of water relative to the total weight of the composition.

Claim 3 (Original): The composition of Claim 1, which has a viscosity ranging from 7 to 20 Pa·s.

Claim 4 (Previously Presented): The composition of Claim 22, wherein the amount of silica(s) is at least 1% on an active material weight basis relative to the total weight of the composition.

Claim 5 (Canceled).

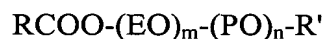
Claim 6 (Original): The composition of Claim 1, wherein the hydrophobic silica is selected from the group consisting of amorphous silicas of pyrogenic origin.

Claim 7 (Original): The composition of Claim 1, wherein the hydrophobic silica is selected from the group consisting of silicas having a specific surface ranging from 50 to 500 m<sup>2</sup>/g, a number-average particle size ranging from 3 to 50 nm and a compacted density ranging from 40 to 200 g/l.

Claim 8 (Original): The composition of Claim 1, wherein the amount of oxyalkylenated compound ranges from 1% to 20% on an active material weight basis relative to the total weight of the composition.

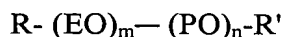
Claim 9 (Previously Presented): The composition of Claim 1, wherein the oxyalkylenated compound is selected from the group consisting of polyethylene glycols, polyethylene glycol esters, polypropylene glycol esters, polyethylene glycol ethers, polypropylene glycol ethers, alkoxyated alkyl derivatives of polyols, oxyalkylenated triesters of glycerol, oxyalkylenated triesters of fatty acids, ethoxyethylenated urethane derivatives modified with alkyl chains, and mixtures thereof.

Claim 10 (Original): The composition of Claim 9, wherein the polyethylene glycol esters have the formula:



wherein  $0 < m \leq 300$  and  $0 \leq n \leq 300$  and  $m + n \geq 6$ , R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 11 (Original): The composition of Claim 9, wherein the polyethylene glycol ethers and/or polypropylene glycol ethers have the formula:



in which  $0 \leq m \leq 300$  and  $0 \leq n \leq 300$  and  $m + n \geq 6$ , R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 12 (Original): The composition of Claim 1, wherein the foaming surfactant is selected from the group consisting of nonionic surfactants, anionic surfactants, amphoteric surfactants and zwitterionic surfactants, and mixtures thereof.

Claim 13 (Original): The composition of Claim 1, wherein the amount of foaming surfactant ranges from 2% to 50% on an active material weight basis relative to the total weight of the composition.

Claim 14 (Original): The composition of Claim 1, wherein the foaming surfactant is selected from the group consisting of alkyl polyglucosides, maltose esters, polyglycerolated fatty alcohols, glucamine derivatives, carboxylates, amino acid derivatives, alkyl sulfates, alkyl ether sulfates, sulfonates, isethionates, taurates, sulfosuccinates, alkyl sulfoacetates, phosphates and alkyl phosphates, polypeptides, anionic alkyl polyglucoside derivatives, fatty acid soaps, betaines, N-alkylamidobetaines and derivatives thereof, glycine derivatives, sultaines, alkyl polyaminocarboxylates and alkylamphoacetates, and mixtures thereof.

Claim 15 (Original): The composition of Claim 12, wherein the foaming surfactant is selected from the group consisting of an anionic surfactant which is an acylsarcosinate, an oxyethylenated alkyl ether sulfate, an N-aryl N-methyltaurate, an N-acylglutamate, an acylisethionate, an sulfosuccinate, a phosphate or an alkyl phosphate; a polypeptide or a soap; an amphoteric or zwitterionic surfactant which is a betaine or an alkylamphoacetate; a nonionic surfactant which is an alkyl polyglucoside, O-octanoyl-6'-D-maltose, O-dodecanoyl-6'-D-maltose, polyglycerolated dodecanediol (3.5 mole of glycerol) and 2-ethylhexyloxycarbonyl-N-methylglucamine; and mixtures of these surfactants.



Claim 16 (Original): The composition of Claim 1, which further comprises at least one solvent selected from the group consisting of alcohols comprising from 1 to 6 carbon atoms and polyols, and mixtures thereof.

Claim 17 (Original): A method of treating the skin, the eyes, the scalp and/or the hair, comprising:

applying the composition of Claim 1 to the skin, the eyes, the scalp and/or the hair thereby cleansing and/or removing make-up from the skin, the eyes, the scalp and/or the hair.

Claim 18 (Original): A method of treating greasy skin, comprising:

applying the composition of Claim 1 to the skin, thereby removing grease from the skin.

Claim 19 (Original): A method of disinfecting the skin and/or the scalp, comprising:

applying the composition of Claim 1 to the skin and/or the scalp, thereby disinfecting the skin and/or the scalp.

Claim 20 (Original): A method of cleansing the skin, the eyes, the scalp and/or the hair, comprising:

applying the composition of Claim 1 to the skin, the eyes, the scalp and/or the hair in the presence of water thereby forming a lather; and

removing the lather containing soiling residues by rinsing the lather from the skin, the eyes, the scalp and/or the hair with water.

Claim 21 (Original): A cosmetic mask, comprising:

an applied composition of Claim 1 as a mask on the skin of the face.

Claim 22 (Previously Presented): A cleansing composition, comprising:

(1) at least one foaming surfactant, (2) at least one hydrophobic silica and (3) at least one oxyalkylenated compound in a physiologically acceptable aqueous medium comprising at least 35% by weight of water relative to the total weight of the composition, wherein the oxyalkylenated compound is a thickening agent selected from the group consisting of polyethylene glycols, polyethylene glycol esters, polypropylene glycol esters, polyethylene glycol ethers, polypropylene glycol ethers, alkoxyated alkyl derivatives of polyols, oxyalkylenated triesters of glycerol, oxyalkylenated triesters of fatty acids, ethoxyethylenated urethane derivatives modified with alkyl chains, and mixtures thereof.

Claim 23 (Previously Presented): The composition of Claim 1, wherein the amount of hydrophobic silica ranges from 2% to 10% on an active material weight basis relative to the total weight of the composition.

Claim 24 (Previously Presented): The composition of Claim 23, wherein the amount of hydrophobic silica ranges from 2% to 6% on an active material weight basis relative to the total weight of the composition.

Claim 25 (Previously Presented): The composition of Claim 4, wherein the amount of hydrophobic silica ranges from 2% to 10% on an active material weight basis relative to the total weight of the composition.

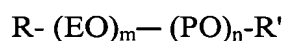
Claim 26 (Previously Presented): The composition of Claim 25, wherein the amount of hydrophobic silica ranges from 2% to 6% on an active material weight basis relative to the total weight of the composition.

Claim 27 (Previously Presented): The composition of Claim 22, wherein the polyethylene glycol esters have the formula:



wherein  $0 < m \leq 300$  and  $0 \leq n \leq 300$  and  $m + n \geq 6$ , R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 28 (Previously Presented): The composition of Claim 22, wherein the polyethylene glycol ethers and/or polypropylene glycol ethers have the formula:



in which  $0 \leq m \leq 300$  and  $0 \leq n \leq 300$  and  $m + n \geq 6$ , R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 29 (Previously Presented): The composition of Claim 1, which has a viscosity ranging from 9 to 15 Pa·s.

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# **International Cosmetic Ingredient Dictionary and Handbook**

**Seventh Edition  
1997**

**Editors**

John A. Wenninger  
G. N. McEwen, Jr., Ph.D., J.D.

**Volume 2**

***Published by***

**The Cosmetic, Toiletry, and Fragrance Association**  
1101 17th Street, N.W., Suite 300  
Washington, DC 20036-4702

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## PEG-40 Hydrogenated Castor Oil

### PEG-40 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-40 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 40 moles of ethylene oxide.

**Information Sources:** 21CFR177.2800, CTFA S, NF XVIII, TSCA, USAN

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Surfactant - Emulsifying Agent; Surfactant - Solubilizing Agent

**Reported Product Categories:** Tonics, Dressings, and Other Hair Grooming Aids; Aftershave Lotions; Body and Hand Preparations (Excluding Shaving Preparations); Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Skin Care Preparations, Misc.; Bath Preparations, Misc.; Moisturizing Preparations; Colognes and Toilet Waters; Skin Fresheners; Hair Preparations (Non-coloring), Misc.; Personal Cleanliness Products, Misc.; Hair Wave Sets; Bath Soaps and Detergents; Paste Masks (Mud Packs); Shaving Preparations, Misc.; Fragrance Preparations, Misc.; Indoor Tanning Preparations; Eye Shadows; Mascara; Hair Sprays (Aerosol Fixatives); Face Powders; Face and Neck Preparations (Excluding Shaving Preparations); Foundations

**Technical Names:**

Polyethylene Glycol 2000 Hydrogenated Castor Oil  
Polyoxyethylene (40) Hydrogenated Castor Oil

**Trade Names:**

Akyporox CO 400 (Chem-Y)  
Calgene Nonionic GRH-40 (Calgene)  
Cremophor CO 40 (BASF)  
Cremophor RH 40 (BASF)  
Cremophor RH 410 (BASF)  
Croduct 40 (Croda Oleochemicals)  
Emulsifier 17 P (Graf)  
Jeechem CAH-40 (Jeen)  
Lipocol HCO-40 (Lipo)  
Lipovol HCO-40 (Lipo)  
Nikkol HCO-40 (Nikko)  
Protachem CAH-40 (Protameen)  
Simulsol 1293 (Sol) (SEPPIC)  
Sipotrig HCO-40 (Specialty Industrial)  
Sympatens-TRH/400 (Kolb)  
Tagat R40 (Goldschmidt)  
Unipeg-CO-40H (Universal Preserv-A-Chem)  
Witconol 2739 (Witco)

**Trade Name Mixtures:**

Biobranil Watersoluble 2/012600 (Dragoco)  
Bio-Sulphur Liquid (Novarom)  
Chamazulene - HCE (Seporga)  
Chamomile CL 2/033026 (Dragoco)

Covafresh (Wackherr)  
Covafresh II (Wackherr)  
COVASORB EW (Wackherr)  
Cremogen Camomile MEW Special New (739027) (Haarmann & Reimer)  
Cremogen Myrrh (PN 775 464) (Haarmann & Reimer)  
Cremogen Rosemary Forte (758302) (Haarmann & Reimer)  
Cremophor RH 455 (BASF)  
C8 Soie Hydro (Phytocos)  
Emulsifier 2/014160 (Dragoco)  
Ferulan Proactiv (GfN)  
Hydrocos (Cosmetochem)  
Melaclear (Sederma)  
Microfolia (Wackherr)  
Rosemary CL 2/033253 (Dragoco)  
Solubilisant Gamma 2428 (Gattefosse s.a.)  
Solubilisant LRI (Wackherr)  
Standamul Conc. 1002 (Henkel)  
Standamul Conc. 1002 (Henkel/COSPHA)  
Unimul-1002 Conc. (Universal Preserv-A-Chem)

### PEG-45 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-45 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 45 moles of ethylene oxide.

**Information Sources:** 21CFR177.2800

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Surfactant - Cleansing Agent; Surfactant - Solubilizing Agent

**Technical Names:**

Polyethylene Glycol (45) Hydrogenated Castor Oil  
Polyoxyethylene (45) Hydrogenated Castor Oil

### PEG-50 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-50 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 50 moles of ethylene oxide.

**Information Sources:** 21CFR177.2800, TSCA

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Surfactant - Cleansing Agent; Surfactant - Solubilizing Agent

## PEG-60 Hydrogenated Castor Oil

**Technical Names:**

Polyethylene Glycol (50) Hydrogenated Castor Oil  
Polyoxyethylene (50) Hydrogenated Castor Oil

**Trade Names:**

Croduct 50 (Croda Oleochemicals)  
Nikkol HCO-50 (Nikko)

### PEG-54 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-54 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 54 moles of ethylene oxide.

**Information Sources:** 21CFR177.2800

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Surfactant - Cleansing Agent; Surfactant - Solubilizing Agent

**Technical Names:**

Polyethylene Glycol (54) Hydrogenated Castor Oil  
Polyoxyethylene (54) Hydrogenated Castor Oil

**Trade Name:**

Arlatone 289 (ICI Surfactants)

### PEG-55 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-55 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 55 moles of ethylene oxide.

**Information Sources:** 21CFR177.2800

**Chemical Classes:** Alkoxyated Alcohols; Glyceryl Esters and Derivatives

**Functions:** Surfactant - Cleansing Agent; Surfactant - Solubilizing Agent

**Technical Names:**

Polyethylene Glycol (55) Hydrogenated Castor Oil  
Polyoxyethylene (55) Hydrogenated Castor Oil

### PEG-60 HYDROGENATED CASTOR OIL

**CAS Number:** 61788-85-0 (generic)

**Definition:** PEG-60 Hydrogenated Castor Oil is a polyethylene glycol derivative of Hydrogenated Castor Oil (q.v.) with an average of 60 moles of ethylene oxide.

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frequently classified, on the basis of their ionic characteristics, as amphoteric, anionic, cationic, or nonionic. In cosmetics, surfactants perform a variety of important functions and are subdivided here into six major groups:

Surfactants - Cleansing Agents  
 Surfactants - Emulsifying Agents  
 Surfactants - Foam Boosters  
 Surfactants - Hydrotropes  
 Surfactants - Solubilizing Agents  
 Surfactants - Suspending Agents

In addition, some surfactants function as *Hair Conditioning Agents*, and some are included in the listing of *Skin-Conditioning Agents - Miscellaneous*. In order to avoid unnecessary repetition, no comprehensive listing of surfactants is provided. Instead, surfactants are listed on the basis of their common usage in the above functional classifications. It should be understood that individual surfactants may be used for other functions in addition to this classification.

## Surfactants - Cleansing Agents

Surfactants - Cleansing Agents, are used for skin and hair-cleaning purposes and as emulsifiers in cosmetics. In this function, surfactants wet body surfaces, emulsify or solubilize oils, and suspend soil. It is characteristic (and expected by some consumers) that such agents should contribute foaming and lathering properties to cleansing products and bubble baths. The listing includes not only soaps but also fatty acids which yield soaps upon reaction with an alkali.

Surfactants - Cleansing Agents are routinely used as emulsifiers.

Almondamidopropylamine Oxide  
 Almondamidopropyl Betaine  
 Aminopropyl Laurylglutamine  
 Ammonium C12-15 Alkyl Sulfate  
 Ammonium Capryleth Sulfate  
 Ammonium Cocomonoglyceride Sulfate  
 Ammonium Coco-Sulfate  
 Ammonium Cocoyl Isethionate  
 Ammonium Cocoyl Sarcosinate  
 Ammonium C12-15 Pareth Sulfate  
 Ammonium C9-10 Perfluoroalkylsulfonate  
 Ammonium Dimethicone Copolyol Sulfate  
 Ammonium Dodecylbenzenesulfonate  
 Ammonium Isostearate  
 Ammonium Laureth-6 Carboxylate  
 Ammonium Laureth-8 Carboxylate  
 Ammonium Laureth Sulfate  
 Ammonium Laureth-5 Sulfate  
 Ammonium Laureth-7 Sulfate  
 Ammonium Laureth-9 Sulfate  
 Ammonium Laureth-12 Sulfate  
 Ammonium Lauroyl Sarcosinate  
 Ammonium Lauryl Sulfate  
 Ammonium Lauryl Sulfosuccinate  
 Ammonium Myreth Sulfate  
 Ammonium Myristyl Sulfate  
 Ammonium Nonoxynol-4 Sulfate  
 Ammonium Nonoxynol-30 Sulfate  
 Ammonium Oleate  
 Ammonium Palm Kernel Sulfate

Ammonium Stearate  
 Ammonium Tallate  
 AMP-Isostearoyl Hydrolyzed Collagen  
 AMP-Isostearoyl Hydrolyzed Soy Protein  
 AMP-Isostearoyl Hydrolyzed Wheat Protein  
 AMPD-Isostearoyl Hydrolyzed Collagen  
 AMPD-Rosin Hydrolyzed Collagen  
 Apricotamidopropyl Betaine  
 Arachidic Acid  
 Avocadamidopropyl Betaine  
 Babassuamidopropylamine Oxide  
 Babassuamidopropyl Betaine  
 Beeswax Acid  
 Behenamidopropyl Betaine  
 Behenamine Oxide  
 Beheneth-25  
 Beheneth-30  
 Behenic Acid  
 Behenyl Betaine  
 Butoxynol-5 Carboxylic Acid  
 Butoxynol-19 Carboxylic Acid  
 Butyl Glucoside  
 Butylglucoside Caprate  
 Butyloctanoic Acid  
 C18-36 Acid  
 C9-16 Alkanes/Cycloalkanes  
 C10-14 Alkyl Benzenesulfonic Acid  
 C9-15 Alkyl Phosphate  
 Canolamidopropyl Betaine  
 Capric Acid

Caproic Acid  
 Caproyl Ethyl Glucoside  
 Capryl/Capramidopropyl Betaine  
 Capryleth-4 Carboxylic Acid  
 Capryleth-6 Carboxylic Acid  
 Capryleth-9 Carboxylic Acid  
 Caprylic Acid  
 Capryloyl Collagen Amino Acids  
 Capryloyl Glycine  
 Capryloyl Hydrolyzed Collagen  
 Capryloyl Hydrolyzed Keratin  
 Capryloyl Keratin Amino Acids  
 Capryloyl Silk Amino Acids  
 Caprytyl/Capryl Glucoside  
 Caprytyl Pyrrolidone  
 Carnitine  
 Cetareth-20  
 Cetareth-23  
 Cetareth-24  
 Cetareth-25  
 Cetareth-27  
 Cetareth-28  
 Cetareth-29  
 Cetareth-30  
 Cetareth-33  
 Cetareth-34  
 Cetareth-40  
 Cetareth-50  
 Cetareth-55  
 Cetareth-60

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## Surfactants - Cleansing Agents (Cont.)

Ceteareth-80	DEA-C12-13 Alkyl Sulfate	Disodium Coco-Glucoside Sulfosuccinate
Ceteareth-100	DEA-C12-15 Alkyl Sulfate	Disodium Cocoyl Butyl Gluceth-10 Sulfosuccinate
Ceteareth-25 Carboxylic Acid	DEA-Ceteareth-2 Phosphate	Disodium Cocoyl Glutamate
Ceteareth-2 Phosphate	DEA-Cetyl Sulfate	Disodium C12-15 Pareth Sulfosuccinate
Ceteareth-4 Phosphate	DEA-Cocoamphodipropionate	Disodium Deceth-5 Sulfosuccinate
Ceteareth-5 Phosphate	DEA-C12-13 Pareth-3 Sulfate	Disodium Deceth-6 Sulfosuccinate
Ceteareth-10 Phosphate	DEA-Cyclocarboxypropyloleate	Disodium Decyl Phenyl Ether Disulfonate
Ceteth-20	DEA-Dodecylbenzenesulfonate	Disodium Dihydroxyethyl
Ceteth-24	DEA-Isostearate	Sulfosuccinylundecylenate
Ceteth-25	DEA-Laureth Sulfate	Disodium Dimethicone Copolyol Sulfosuccinate
Ceteth-30	DEA-Lauryl Sulfate	Disodium Hydrogenated Cottonseed Glyceride
Ceteth-45	DEA-Linoleate	Sulfosuccinate
Ceteth-8 Phosphate	DEA-Methyl Myristate Sulfonate	Disodium Hydrogenated Tallow Glutamate
Ceteth-10 Phosphate	DEA-Myreth Sulfate	Disodium Hydroxydecyl Sorbitol Citrate
Cetoleth-22	DEA-Myristate	Disodium Isodecyl Sulfosuccinate
Cetoleth-24	DEA-Myristyl Sulfate	Disodium Isostearamido MEA-Sulfosuccinate
Cetoleth-25	DEA-Oleth-5 Phosphate	Disodium Isostearamido MIPA-Sulfosuccinate
Cetyl Betaine	DEA-Oleth-20 Phosphate	Disodium Isostearoamphodiacetate
Cocamidoethyl Betaine	Deceth-7 Carboxylic Acid	Disodium Isostearoamphodipropionate
Cocamidopropyl Amine Oxide	Deceth-7 Glucoside	Disodium Isostearyl Sulfosuccinate
Cocamidopropylamine Oxide	Decylamine Oxide	Disodium Laneth-5 Sulfosuccinate
Cocamidopropyl Betaine	Decyl Betaine	Disodium Lauramido MEA-Sulfosuccinate
Cocamidopropyl Hydroxysultaine	Decyl Glucoside	Disodium Lauramido PEG-2 Sulfosuccinate
Cocamine Oxide	Decyltetradeceth-30	Disodium Lauramido PEG-5 Sulfosuccinate
Cocaminobutyric Acid	Decyltetradecylamine Oxide	Disodium Laureth-5 Carboxyamphodiacetate
Cocaminopropionic Acid	Diammonium Lauramido-MEA Sulfosuccinate	Disodium Laureth-7 Citrate
Coceth-7 Carboxylic Acid	Diammonium Lauryl Sulfosuccinate	Disodium Laureth Sulfosuccinate
Coceth-4 Glucoside	Diammonium Oleamido PEG-2 Sulfosuccinate	Disodium Laureth-6 Sulfosuccinate
Cocoamphodipropionic Acid	Di-C12-15 Pareth-2 Phosphate	Disodium Laureth-9 Sulfosuccinate
Cocobetainamido Amphopropionate	Di-C12-15 Pareth-4 Phosphate	Disodium Laureth-12 Sulfosuccinate
Coco-Betaine	Di-C12-15 Pareth-6 Phosphate	Disodium Lauriminodipropionate
Coco-Glucoside	Di-C12-15 Pareth-8 Phosphate	Disodium Lauroamphodiacetate
Coco-Hydroxysultaine	Di-C12-15 Pareth-10 Phosphate	Disodium Lauroamphodipropionate
Coco-Morpholine Oxide	Diethylamine Laureth Sulfate	Disodium Lauryl Phenyl Ether Disulfonate
Coconut Acid	Dihydroxyethyl C8-10 Alkoxypropylamine Oxide	Disodium Lauryl Sulfosuccinate
Coco/Oleamidopropyl Betaine	Dihydroxyethyl C9-11 Alkoxypropylamine Oxide	Disodium Myristamido MEA-Sulfosuccinate
Coco-Sultaine	Dihydroxyethyl C12-15 Alkoxypropylamine Oxide	Disodium Nonoxynol-10 Sulfosuccinate
Cocoyl Glutamic Acid	Dihydroxyethyl Cocamine Oxide	Disodium Oleamido MEA-Sulfosuccinate
Cocoyl Hydrolyzed Collagen	Dihydroxyethyl Lauramine Oxide	Disodium Oleamido MIPA-Sulfosuccinate
Cocoyl Hydrolyzed Keratin	Dihydroxyethyl Stearamine Oxide	Disodium Oleamido PEG-2 Sulfosuccinate
Cocoyl Hydrolyzed Soy Protein	Dihydroxyethyl Tallowamine Oxide	Disodium Oleoamphodipropionate
Cocoyl Sarcosine	Dimethicone Copolyol Phosphate	Disodium Oleth-3 Sulfosuccinate
Corn Acid	Dimethicone Propyl PG-Betaine	Disodium Oleyl Phosphate
Cottonseed Acid	Dimyristyl Phosphate	Disodium Oleyl Sulfosuccinate
C11-15 Pareth-30	Diocetyl Sodium Sulfosuccinate	Disodium Palmitamido PEG-2 Sulfosuccinate
C11-15 Pareth-40	Dioleoylamidoethyl Hydroxyethylmonium	Disodium Palmitoleamido PEG-2 Sulfosuccinate
C12-13 Pareth-23	Methosulfate	Disodium PEG-4 Cocamido MIPA-Sulfosuccinate
C20-40 Pareth-40	DIPA-Hydrogenated Cocoate	Disodium PEG-8 Palm Glycerides Sulfosuccinate
C22-24 Pareth-33	DIPA-Lanolate	Disodium PPG-2-Isodeceth-7
C30-50 Pareth-40	Disodium Caproamphodiacetate	Carboxyamphodiacetate
C9-11 Pareth-6 Carboxylic Acid	Disodium Caproamphodipropionate	Disodium Ricinoleamido MEA-Sulfosuccinate
C11-15 Pareth-7 Carboxylic Acid	Disodium Capryloamphodiacetate	Disodium Sitostereth-14 Sulfosuccinate
C12-13 Pareth-5 Carboxylic Acid	Disodium Capryloamphodipropionate	Disodium Stearamido MEA-Sulfosuccinate
C12-13 Pareth-8 Carboxylic Acid	Disodium Cetearyl Sulfosuccinate	Disodium Steariminodipropionate
C12-13 Pareth-12 Carboxylic Acid	Disodium Cetyl Phenyl Ether Disulfonate	Disodium Stearoamphodiacetate
C12-15 Pareth-7 Carboxylic Acid	Disodium Cocamido MEA-Sulfosuccinate	Disodium Stearyl Glutamate
C12-15 Pareth-8 Carboxylic Acid	Disodium Cocamido MIPA-Sulfosuccinate	Disodium Stearyl Sulfosuccinamate
C14-15 Pareth-8 Carboxylic Acid	Disodium Cocamido PEG-3 Sulfosuccinate	Disodium Stearyl Sulfosuccinate
C12-13 Pareth-10 Phosphate	Disodium	Disodium 2-Sulfolaurate
C12-15 Pareth-8 Phosphate	Cocoamphocarboxyethylhydroxypropylsulfonate	Disodium Tallamido MEA-Sulfosuccinate
C12-15 Pareth-10 Phosphate	Disodium Cocoamphodiacetate	Disodium Tallowamido MEA-Sulfosuccinate
C12-16 Pareth-6 Phosphate	Disodium Cocoamphodipropionate	Disodium Tallowamphodiacetate

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Disodium Tallowiminodipropionate  
 Disodium Tallow Sulfosuccinamate  
 Disodium Tridecylsulfosuccinate  
 Disodium Undecylenamido MEA-Sulfosuccinate  
 Disodium Undecylenamido PEG-2 Sulfosuccinate  
 Disodium Wheat Germamido MEA-Sulfosuccinate  
 Disodium Wheat Germamido PEG-2 Sulfosuccinate  
 Disodium Wheatgermamphodiaceate  
 Di-TEA-Oleamido PEG-2 Sulfosuccinate  
 Di-TEA-Palmitoyl Aspartate  
 Ditridecyl Sodium Sulfosuccinate  
 Dodecylbenzene Sulfonic Acid  
 Erucamidopropyl Hydroxysultaine  
 Ethyl PEG-15 Cocamine Sulfate  
 Hexyldecanoic Acid  
 Hydrogenated Coconut Acid  
 Hydrogenated Laneth-25  
 Hydrogenated Menhaden Acid  
 Hydrogenated Palm Acid  
 Hydrogenated Palm Kernel Amine Oxide  
 Hydrogenated Tallow Acid  
 Hydrogenated Tallowamine Oxide  
 Hydrogenated Tallow Betaine  
 Hydrogenated Talloweth-25  
 Hydrogenated Tallowyl Glutamic Acid  
 Hydroxyceteth-60  
 Hydroxyethylbutylamine Laureth Sulfate  
 Hydroxyethyl Carboxymethyl Cocamidopropylamine  
 Hydroxyethyl Hydroxypropyl C12-15 Alkoxypropylamine Oxide  
 Hydroxystearic Acid  
 Isoceteth-30  
 Isopropanolamine Lanolate  
 Isopropylamine Dodecylbenzenesulfonate  
 Isostearamidopropylamine Oxide  
 Isostearamidopropyl Betaine  
 Isostearamidopropyl Morpholine Oxide  
 Isosteareth-22  
 Isosteareth-50  
 Isostearic Acid  
 Isostearyl Hydrolyzed Collagen  
 Jojoba Wax PEG-80 Esters  
 Jojoba Wax PEG-120 Esters  
 Laneth-20  
 Laneth-25  
 Laneth-40  
 Laneth-50  
 Laneth-60  
 Laneth-75  
 Lanolin Acid  
 Lauramidopropylamine Oxide  
 Lauramidopropyl Betaine  
 Lauramine Oxide  
 Lauraminopropionic Acid  
 Laureth-16  
 Laureth-20  
 Laureth-23  
 Laureth-25  
 Laureth-30

Laureth-40  
 Laureth-3 Carboxylic Acid  
 Laureth-4 Carboxylic Acid  
 Laureth-5 Carboxylic Acid  
 Laureth-6 Carboxylic Acid  
 Laureth-10 Carboxylic Acid  
 Laureth-11 Carboxylic Acid  
 Laureth-12 Carboxylic Acid  
 Laureth-13 Carboxylic Acid  
 Laureth-14 Carboxylic Acid  
 Laureth-17 Carboxylic Acid  
 Laureth-6 Citrate  
 Laureth-7 Citrate  
 Laureth-3 Phosphate  
 Laureth-4 Phosphate  
 Laureth-7 Phosphate  
 Laureth-8 Phosphate  
 Laureth-7 Tartrate  
 Lauric Acid  
 Lauroamphodipropionic Acid  
 Lauroyl Collagen Amino Acids  
 Lauroyl Hydrolyzed Collagen  
 Lauroyl Hydrolyzed Elastin  
 Lauroyl Methyl Glucamide  
 Lauroyl Sarcosine  
 Lauroyl Silk Amino Acids  
 Lauryl Betaine  
 Lauryl Glucoside  
 Lauryl Hydroxysultaine  
 Lauryl Pyrrolidone  
 Lauryl Sultaine  
 Linoleic Acid  
 Linolenic Acid  
 Linseed Acid  
 Lysine Cocoate  
 Magnesium Coco-Sulfate  
 Magnesium Laureth-11 Carboxylate  
 Magnesium Laureth Sulfate  
 Magnesium Laureth-5 Sulfate  
 Magnesium Laureth-8 Sulfate  
 Magnesium Laureth-16 Sulfate  
 Magnesium Lauryl Hydroxypropyl Sulfonate  
 Magnesium Lauryl Sulfate  
 Magnesium Methyl Cocoyl Taurate  
 Magnesium Myreth Sulfate  
 Magnesium Oleth Sulfate  
 Magnesium/TEA-Coco-Sulfate  
 MEA-Laureth-6 Carboxylate  
 MEA-Laureth Sulfate  
 MEA-Lauryl Sulfate  
 MEA-PPG-6-Laureth-6-Carboxylate  
 MEA-PPG-8-Steareth-7 Carboxylate  
 MEA-Undecylenate  
 Meroxapol 108  
 Meroxapol 174  
 Meroxapol 178  
 Meroxapol 254  
 Meroxapol 255  
 Meroxapol 258  
 Meroxapol 314  
 Methyl Morpholine Oxide  
 Milkamidopropyl Amine Oxide

Milkamidopropyl Betaine  
 Minkamidopropylamine Oxide  
 Minkamidopropyl Betaine  
 MIPA C12-15 Pareth Sulfate  
 MIPA-Dodecylbenzenesulfonate  
 MIPA-Laureth Sulfate  
 MIPA-Lauryl Sulfate  
 Mixed Isopropanolamines Lanolate  
 Mixed Isopropanolamines Lauryl Sulfate  
 Mixed Isopropanolamines Myristate  
 Morpholine Oleate  
 Morpholine Stearate  
 Myreth-3 Carboxylic Acid  
 Myreth-5 Carboxylic Acid  
 Myristalkonium Chloride  
 Myristamidopropylamine Oxide  
 Myristamidopropyl Betaine  
 Myristamidopropyl Dimethylamine Phosphate  
 Myristamine Oxide  
 Myristaminopropionic Acid  
 Myristic Acid  
 Myristoyl Glutamic Acid  
 Myristoyl Hydrolyzed Collagen  
 Myristoyl Sarcosine  
 Myristyl Betaine  
 Myristyl/Cetyl Amine Oxide  
 Nonoxynol-20  
 Nonoxynol-23  
 Nonoxynol-25  
 Nonoxynol-30  
 Nonoxynol-35  
 Nonoxynol-40  
 Nonoxynol-44  
 Nonoxynol-50  
 Nonoxynol-100  
 Nonoxynol-120  
 Nonoxynol-5 Carboxylic Acid  
 Nonoxynol-8 Carboxylic Acid  
 Nonoxynol-10 Carboxylic Acid  
 Nonoxynol-6 Phosphate  
 Nonoxynol-9 Phosphate  
 Nonoxynol-10 Phosphate  
 Nonyl Nonoxynol-49  
 Nonyl Nonoxynol-100  
 Nonyl Nonoxynol-150  
 Nonyl Nonoxynol-7 Phosphate  
 Nonyl Nonoxynol-9 Phosphate  
 Nonyl Nonoxynol-10 Phosphate  
 Nonyl Nonoxynol-15 Phosphate  
 Nonyl Nonoxynol-24 Phosphate  
 Octeth-3 Carboxylic Acid  
 Octoxynol-16  
 Octoxynol-25  
 Octoxynol-30  
 Octoxynol-33  
 Octoxynol-40  
 Octoxynol-70  
 Octoxynol-20 Carboxylic Acid  
 Octyldodeceth-20  
 Octyldodeceth-25  
 Octyldodeceth-30  
 Oleamidopropylamine Oxide

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## Surfactants - Cleansing Agents (Cont.)

Oleamidopropyl Betaine	PEG-23 Glyceryl Laurate	PEG-75 Propylene Glycol Stearate
Oleamidopropyl Hydroxysultaine	PEG-30 Glyceryl Laurate	PEG-120 Propylene Glycol Stearate
Oleamine Oxide	PEG-25 Glyceryl Oleate	PEG-40 Ricinoleamide
Oleic Acid	PEG-30 Glyceryl Oleate	PEG-75 Shea Butter Glycerides
Oleoyl Hydrolyzed Collagen	PEG-25 Glyceryl Stearate	PEG-75 Shorea Butter Glycerides
Oleoyl Sarcosine	PEG-30 Glyceryl Stearate	PEG-20 Sorbitan Cocoate
Oleth-20	PEG-120 Glyceryl Stearate	PEG-20 Sorbitan Isostearate
Oleth-23	PEG-200 Glyceryl Stearate	PEG-40 Sorbitan Lanolate
Oleth-25	PEG-28 Glyceryl Tallowate	PEG-75 Sorbitan Lanolate
Oleth-30	PEG-80 Glyceryl Tallowate	PEG-10 Sorbitan Laurate
Oleth-40	PEG-200 Glyceryl Tallowate	PEG-40 Sorbitan Laurate
Oleth-44	<u>PEG-45 Hydrogenated Castor Oil</u>	PEG-44 Sorbitan Laurate
Oleth-50	PEG-50 Hydrogenated Castor Oil	PEG-75 Sorbitan Laurate
Oleth-3 Carboxylic Acid	PEG-54 Hydrogenated Castor Oil	PEG-80 Sorbitan Laurate
Oleth-6 Carboxylic Acid	PEG-55 Hydrogenated Castor Oil	PEG-80 Sorbitan Palmitate
Oleth-10 Carboxylic Acid	PEG-60 Hydrogenated Castor Oil	PEG-40 Sorbitan Stearate
Oleyl Betaine	PEG-80 Hydrogenated Castor Oil	PEG-60 Sorbitan Stearate
Olivamidopropylamine Oxide	PEG-100 Hydrogenated Castor Oil	PEG-160 Sorbitan Triisostearate
Olivamidopropyl Betaine	PEG-200 Hydrogenated Castor Oil	PEG-40 Soy Sterol
Olive Acid	PEG-30 Hydrogenated Lanolin	PEG-2 Stearamide Carboxylic Acid
Palm Acid	PEG-70 Hydrogenated Lanolin	PEG-9 Stearamide Carboxylic Acid
Palamidopropyl Betaine	PEG-4 Isostearate	PEG-20 Stearate
Palmitamidopropylamine Oxide	PEG-6 Isostearate	PEG-23 Stearate
Palmitamidopropyl Betaine	PEG-8 Isostearate	PEG-25 Stearate
Palmitamine Oxide	PEG-10 Isostearate	PEG-30 Stearate
Palmitic Acid	PEG-12 Isostearate	PEG-32 Stearate
Palmitoyl Collagen Amino Acids	PEG-26 Jojoba Acid	PEG-35 Stearate
Palmitoyl Glycine	PEG-40 Jojoba Acid	PEG-36 Stearate
Palmitoyl Hydrolyzed Collagen	PEG-15 Jojoba Alcohol	PEG-40 Stearate
Palmitoyl Hydrolyzed Milk Protein	PEG-26 Jojoba Alcohol	PEG-45 Stearate
Palmitoyl Hydrolyzed Wheat Protein	PEG-40 Jojoba Alcohol	PEG-50 Stearate
Palmitoyl Keratin Amino Acids	PEG-35 Lanolin	PEG-75 Stearate
Palmitoyl Oligopeptide	PEG-40 Lanolin	PEG-90 Stearate
Palmitoyl Silk Amino Acids	PEG-50 Lanolin	PEG-100 Stearate
Palm Kernel Acid	PEG-55 Lanolin	PEG-120 Stearate
Palm Kernelamidopropyl Betaine	PEG-60 Lanolin	PEG-150 Stearate
Peanut Acid	PEG-75 Lanolin	PEG-45 Stearate Phosphate
PEG-10 Castor Oil	PEG-85 Lanolin	PEG-20 Tallate
<u>PEG-40 Castor Oil</u>	PEG-100 Lanolin	PEG-50 Tallow Amide
PEG-44 Castor Oil	PEG-150 Lanolin	PEG-20 Tallowate
PEG-50 Castor Oil	PEG-75 Lanolin Oil	PEG-66 Trihydroxystearin
PEG-54 Castor Oil	PEG-3 Lauramine Oxide	PEG-200 Trihydroxystearin
PEG-55 Castor Oil	PEG-20 Laurate	Pelargonic Acid
PEG-60 Castor Oil	PEG-32 Laurate	Pentadecynol-200
PEG-100 Castor Oil	PEG-75 Laurate	Poloxamer 105
PEG-200 Castor Oil	PEG-150 Laurate	Poloxamer 108
PEG-11 Cocamide	PEG-70 Mango Glycerides	Poloxamer 182
PEG-75 Dilaurate	PEG-20 Mannitan Laurate	Poloxamer 183
PEG-150 Dilaurate	PEG-120 Methyl Glucose Dioleate	Poloxamer 184
PEG-75 Dioleate	PEG-80 Methyl Glucose Laurate	Poloxamer 188
PEG-150 Dioleate	PEG-4 Montanate	Poloxamer 217
PEG-75 Distearate	PEG-30 Oleamine	Poloxamer 234
PEG-120 Distearate	PEG-20 Oleate	Poloxamer 235
PEG-150 Distearate	PEG-23 Oleate	Poloxamer 237
PEG-175 Distearate	PEG-32 Oleate	Poloxamer 238
PEG-250 Distearate	PEG-36 Oleate	Poloxamer 288
PEG-30 Glyceryl Cocoate	PEG-75 Oleate	Poloxamer 334
PEG-40 Glyceryl Cocoate	PEG-150 Oleate	Poloxamer 335
PEG-78 Glyceryl Cocoate	PEG-20 Palmitate	Poloxamer 338
PEG-80 Glyceryl Cocoate	PEG/PPG-300/55 Copolymer	Poloxamine 908
PEG-30 Glyceryl Isostearate	PEG-55 Propylene Glycol Oleate	Poloxamine 1508
PEG-60 Glyceryl Isostearate	PEG-25 Propylene Glycol Stearate	Potassium Abietoyl Hydrolyzed Collagen

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Potassium Babassuate	Rice Bran Acid	Sodium C16-18 Olefin Sulfonate
Potassium C9-15 Alkyl Phosphate	Ricinoleamidopropyl Betaine	Sodium Cornamphopropionate
Potassium Castorate	Ricinoleic Acid	Sodium C13-15 Pareth-8 Butyl Phosphate
Potassium Cocoate	Ricinoleth-40	Sodium C9-11 Pareth-6 Carboxylate
Potassium Cocoyl Glutamate	Saponins	Sodium C11-15 Pareth-7 Carboxylate
Potassium Cocoyl Glycinate	Sesamidopropylamine Oxide	Sodium C12-13 Pareth-5 Carboxylate
Potassium Cocoyl Hydrolyzed Casein	Sesamidopropyl Betaine	Sodium C12-13 Pareth-8 Carboxylate
Potassium Cocoyl Hydrolyzed Collagen	Sodium Babassuate	Sodium C12-13 Pareth-12 Carboxylate
Potassium Cocoyl Hydrolyzed Corn Protein	Sodium Bisglycol Ricinosulfosuccinate	Sodium C12-15 Pareth-6 Carboxylate
Potassium Cocoyl Hydrolyzed Keratin	Sodium Borageamidopropyl PG-Dimonium Chloride Phosphate	Sodium C12-15 Pareth-7 Carboxylate
Potassium Cocoyl Hydrolyzed Potato Protein	Sodium Butoxynol-12 Sulfate	Sodium C12-15 Pareth-8 Carboxylate
Potassium Cocoyl Hydrolyzed Rice Bran Protein	Sodium C13-17 Alkane Sulfonate	Sodium C14-15 Pareth-8 Carboxylate
Potassium Cocoyl Hydrolyzed Rice Protein	Sodium C14-18 Alkane Sulfonate	Sodium C14-15 Pareth-PG Sulfonate
Potassium Cocoyl Hydrolyzed Silk	Sodium C12-15 Alkoxypropyl Iminodipropionate	Sodium C13-15 Pareth-8 Phosphate
Potassium Cocoyl Hydrolyzed Soy Protein	Sodium C9-22 Alkyl Sec Sulfonate	Sodium C10-15 Pareth Sulfate
Potassium Cocoyl Hydrolyzed Wheat Protein	Sodium C14-17 Alkyl Sec Sulfonate	Sodium C12-13 Pareth Sulfate
Potassium Cornate	Sodium C12-13 Alkyl Sulfate	Sodium C12-15 Pareth Sulfate
Potassium Cyclocarboxypropylolate	Sodium C12-15 Alkyl Sulfate	Sodium C12-15 Pareth-3 Sulfonate
Potassium Dihydroxyethyl Cocamine Oxide Phosphate	Sodium C12-18 Alkyl Sulfate	Sodium C12-15 Pareth-7 Sulfonate
Potassium Dimethicone Copolyol Phosphate	Sodium C16-20 Alkyl Sulfate	Sodium C12-15 Pareth-15 Sulfonate
Potassium Dodecylbenzenesulfonate	Sodium Caproamphoacetate	Sodium Deceth-2 Carboxylate
Potassium Laurate	Sodium Caproamphohydroxypropylsulfonate	Sodium Deceth Sulfate
Potassium Lauroyl Collagen Amino Acids	Sodium Caproamphopropionate	Sodium Decylbenzenesulfonate
Potassium Lauroyl Glutamate	Sodium Caprylate	Sodium Dihydroxycetyl Phosphate
Potassium Lauroyl Hydrolyzed Collagen	Sodium Capryleth-2 Carboxylate	Sodium Dilaureth-7 Citrate
Potassium Lauroyl Hydrolyzed Soy Protein	Sodium Capryleth-9 Carboxylate	Sodium Dioleth-8 Phosphate
Potassium Lauroyl Wheat Amino Acids	Sodium Capryloamphoacetate	Sodium Dodecylbenzenesulfonate
Potassium Lauryl Sulfate	Sodium Capryloamphohydroxypropylsulfonate	Sodium Ethyl 2-Sulfolaurate
Potassium Linoleate	Sodium Capryloamphopropionate	Sodium Glyceryl Oleate Phosphate
Potassium Methyl Cocoyl Taurate	Sodium Caprytyl Sulfonate	Sodium Hexeth-4 Carboxylate
Potassium Myristate	Sodium Castorate	Sodium Hydrogenated Tallowoyl Glutamate
Potassium Myristoyl Glutamate	Sodium Cetearyl Sulfate	Sodium Isosteareate
Potassium Myristoyl Hydrolyzed Collagen	Sodium Ceteth-13 Carboxylate	Sodium Isosteareth-6 Carboxylate
Potassium Octoxynol-12 Phosphate	Sodium Cetyl Sulfate	Sodium Isosteareth-11 Carboxylate
Potassium Oleate	Sodium Cocaminopropionate	Sodium Isostearoamphoacetate
Potassium Oleoyl Hydrolyzed Collagen	Sodium Coceth Sulfate	Sodium Isostearoamphopropionate
Potassium Oliviate	Sodium Cocoamphoacetate	Sodium Laneth Sulfate
Potassium Palmate	Sodium Cocoamphohydroxypropylsulfonate	Sodium Lauramido Diacetate
Potassium Palmitate	Sodium Cocoamphopropionate	Sodium Lauraminopropionate
Potassium Palmitoyl Hydrolyzed Wheat Protein	Sodium Cocoate	Sodium Laurate
Potassium Palm Kernelate	Sodium Coco-Glucoside Tartrate	Sodium Laureth-3 Carboxylate
Potassium Peanutate	Sodium Cocoglyceryl Ether Sulfonate	Sodium Laureth-4 Carboxylate
Potassium Rapeseedate	Sodium Coco/Hydrogenated Tallow Sulfate	Sodium Laureth-5 Carboxylate
Potassium Ricinoleate	Sodium Cocomonoglyceride Sulfate	Sodium Laureth-6 Carboxylate
Potassium Soyate	Sodium Cocomonoglyceride Sulfonate	Sodium Laureth-11 Carboxylate
Potassium Stearate	Sodium Coco PG-Dimonium Chloride Phosphate	Sodium Laureth-13 Carboxylate
Potassium Stearoyl Hydrolyzed Collagen	Sodium Coco-Sulfate	Sodium Laureth-14 Carboxylate
Potassium Tallate	Sodium Cocoyl Amino Acids	Sodium Laureth-17 Carboxylate
Potassium Tallowate	Sodium Cocoyl Collagen Amino Acids	Sodium Laureth Sulfate
Potassium Undecylenate	Sodium Cocoyl Glutamate	Sodium Laureth-5 Sulfate
Potassium Undecylenoyl Hydrolyzed Collagen	Sodium Cocoyl Hydrolyzed Collagen	Sodium Laureth-7 Sulfate
PPG-30-Buteth-30	Sodium Cocoyl Hydrolyzed Keratin	Sodium Laureth-8 Sulfate
PPG-36-Buteth-36	Sodium Cocoyl Hydrolyzed Rice Protein	Sodium Laureth-12 Sulfate
PPG-38-Buteth-37	Sodium Cocoyl Hydrolyzed Soy Protein	Sodium Laureth-7 Tartrate
PPG-10 Cetyl Ether Phosphate	Sodium Cocoyl Hydrolyzed Wheat Protein	Sodium Lauriminodipropionate
PPG-3-Deceth-2 Carboxylic Acid	Sodium Cocoyl Isethionate	Sodium Lauroamphoacetate
PPG-20-Glycereth-30	Sodium Cocoyl Sarcosinate	Sodium Lauroamphohydroxypropylsulfonate
Propyltrimonium Hydrolyzed Collagen	Sodium Cocoyl Taurate	Sodium Lauroampho PG-Acetate Phosphate
Quaternium-24	Sodium C12-14 Olefin Sulfonate	Sodium Lauroamphopropionate
Quaternium-52	Sodium C14-16 Olefin Sulfonate	Sodium Lauroyl Aspartate
Rapeseed Acid	Sodium C14-18 Olefin Sulfonate	Sodium Lauroyl Collagen Amino Acids
		Sodium Lauroyl Hydrolyzed Collagen

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## Surfactants - Cleansing Agents (Cont.)

Sodium Lauroyl Hydrolyzed Silk	Sodium Ricinoleoamphoacetate	Steareth-40
Sodium Lauroyl Isethionate	Sodium Soyate	Steareth-50
Sodium Lauroyl Methylaminopropionate	Sodium Soy Hydrolyzed Collagen	Steareth-80
Sodium Lauroyl Oat Amino Acids	Sodium Stearate	Steareth-100
Sodium Lauroyl Sarcosinate	Sodium Stearoamphoacetate	Steareth-2 Phosphate
Sodium Lauroyl Silk Amino Acids	Sodium Stearoamphohydroxypropylsulfonate	Stearic Acid
Sodium Lauroyl Taurate	Sodium Stearoamphopropionate	Stearoyl Glutamic Acid
Sodium Lauroyl Wheat Amino Acids	Sodium Stearoyl Casein	Stearoyl Sarcosine
Sodium Lauryl Phosphate	Sodium Stearoyl Glutamate	Stearyl Betaine
Sodium Lauryl Sulfate	Sodium Stearoyl Hyaluronate	Sulfated Castor Oil
Sodium Lauryl Sulfoacetate	Sodium Stearoyl Hydrolyzed Collagen	Sulfated Glyceryl Oleate
Sodium Linoleate	Sodium Stearoyl Hydrolyzed Corn Protein	Sulfated Olive Oil
Sodium/MEA Laureth-2 Sulfosuccinate	Sodium Stearoyl Hydrolyzed Silk	Sulfated Peanut Oil
Sodium Methyl Cocoyl Taurate	Sodium Stearoyl Hydrolyzed Soy Protein	Sunflower Seed Acid
Sodium Methyl Lauroyl Taurate	Sodium Stearoyl Hydrolyzed Wheat Protein	Tall Oil Acid
Sodium Methyl Myristoyl Taurate	Sodium Stearoyl Lactalbumin	Tallow Acid
Sodium Methyl Oleoyl Taurate	Sodium Stearoyl Oat Protein	Tallowamidopropylamine Oxide
Sodium Methyl Palmitoyl Taurate	Sodium Stearoyl Pea Protein	Tallowamidopropyl Betaine
Sodium Methyl Stearoyl Taurate	Sodium Stearyl Sulfate	Tallowamidopropyl Hydroxysulfate
Sodium Methyl 2-Sulfolaurate	Sodium Tallamphopropionate	Tallowamine Oxide
Sodium Myreth Sulfate	Sodium Tallowamphoacetate	Tallow Betaine
Sodium Myristate	Sodium Tallowate	Tallow Dihydroxyethyl Betaine
Sodium Myristoamphoacetate	Sodium Tallow Sulfate	Tallowoyl Ethyl Glucoside
Sodium Myristoyl Glutamate	Sodium/TEA-Lauroyl Collagen Amino Acids	TEA-Abietoyl Hydrolyzed Collagen
Sodium Myristoyl Hydrolyzed Collagen	Sodium/TEA-Lauroyl Hydrolyzed Collagen	TEA-C10-15 Alkyl Sulfate
Sodium Myristoyl Isethionate	Sodium/TEA-Lauroyl Hydrolyzed Keratin	TEA-C12-13 Alkyl Sulfate
Sodium Myristoyl Sarcosinate	Sodium/TEA-Lauroyl Keratin Amino Acids	TEA-C12-14 Alkyl Sulfate
Sodium Myristyl Sulfate	Sodium/TEA-Undecylenoyl Collagen Amino Acids	TEA-C12-15 Alkyl Sulfate
Sodium Nonoxynol-6 Phosphate	Sodium/TEA-Undecylenoyl Hydrolyzed Collagen	TEA-Canolate
Sodium Nonoxynol-9 Phosphate	Sodium/TEA-Undecylenoyl Hydrolyzed Corn Protein	TEA-Cocoate
Sodium Nonoxynol-1 Sulfate	Sodium/TEA-Undecylenoyl Hydrolyzed Soy Protein	TEA-Coco-Sulfate
Sodium Nonoxynol-3 Sulfate	Sodium/TEA-Undecylenoyl Hydrolyzed Wheat Protein	TEA-Cocoyl Glutamate
Sodium Nonoxynol-4 Sulfate	Sodium Trideceth-3 Carboxylate	TEA-Cocoyl Hydrolyzed Collagen
Sodium Nonoxynol-6 Sulfate	Sodium Trideceth-6 Carboxylate	TEA-Cocoyl Hydrolyzed Soy Protein
Sodium Nonoxynol-8 Sulfate	Sodium Trideceth-7 Carboxylate	TEA-Cocoyl Sarcosinate
Sodium Nonoxynol-10 Sulfate	Sodium Trideceth-8 Carboxylate	TEA-Dodecylbenzenesulfonate
Sodium Nonoxynol-25 Sulfate	Sodium Trideceth-12 Carboxylate	TEA-Hydrogenated Tallowoyl Glutamate
Sodium Octoxynol-2 Ethane Sulfonate	Sodium Trideceth Sulfate	TEA-Isostearate
Sodium Octoxynol-2 Sulfate	Sodium Tridecylbenzenesulfonate	TEA-Isostearoyl Hydrolyzed Collagen
Sodium Octoxynol-6 Sulfate	Sodium Tridecyl Sulfate	TEA-Lauraminopropionate
Sodium Octoxynol-9 Sulfate	Sodium Undeceth-5 Carboxylate	TEA-Laurate
Sodium Oleate	Sodium Undecylenate	TEA-Laureth Sulfate
Sodium Oleoamphoacetate	Sodium Undecylenoamphoacetate	TEA-Lauroyl Collagen Amino Acids
Sodium Oleoamphohydroxypropylsulfonate	Sodium Undecylenoamphopropionate	TEA-Lauroyl Glutamate
Sodium Oleoamphopropionate	Sodium Wheat Germamphoacetate	TEA-Lauroyl Hydrolyzed Collagen
Sodium Oleoyl Hydrolyzed Collagen	Soy Acid	TEA-Lauroyl Keratin Amino Acids
Sodium Oleoyl Isethionate	Soyamidopropylamine Oxide	TEA-Lauroyl Methylaminopropionate
Sodium Oleth Sulfate	Soyamidopropyl Betaine	TEA-Lauroyl Sarcosinate
Sodium Oleyl Sulfate	Stearamidopropylamine Oxide	TEA-Lauryl Sulfate
Sodium Oliviate	Stearamidopropyl Betaine	TEA-Myristaminopropionate
Sodium Palmate	Stearamine Oxide	TEA-Myristate
Sodium Palmitate	Steareth-15	TEA-Myristoyl Hydrolyzed Collagen
Sodium Palmitoyl Hydrolyzed Collagen	Steareth-16	TEA-Oleate
Sodium Palmitoyl Hydrolyzed Wheat Protein	Steareth-20	TEA-Oleoyl Hydrolyzed Collagen
Sodium Palm Kernelate	Steareth-21	TEA-Oleoyl Sarcosinate
Sodium Peanutate	Steareth-25	TEA-Oleyl Sulfate
Sodium PEG-6 Cocamide Carboxylate	Steareth-27	TEA-Palmitate
Sodium PEG-8 Cocamide Carboxylate	Steareth-30	TEA-Palm Kernel Sarcosinate
Sodium PEG-3 Lauramide Carboxylate		TEA-PEG-3 Cocamide Sulfate
Sodium PEG-4 Lauramide Carboxylate		TEA-Rosinate
Sodium Rapeseedate		TEA-Stearate
Sodium Ricinoleate		TEA-Tallate

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## Surfactants - Cleansing Agents (Cont.)

TEA-Tridecylbenzenesulfonate  
TEA-Undecylenate  
TEA-Undecylenoyl Hydrolyzed Collagen  
Tetramethyl Decynediol  
Tetrasodium Dicarboxyethyl Stearyl Sulfosuccinamate  
TIPA-Laureth Sulfate  
TIPA-Lauryl Sulfate  
TIPA-Stearate  
Trideceth-20  
Trideceth-50

Trideceth-3 Carboxylic Acid  
Trideceth-4 Carboxylic Acid  
Trideceth-7 Carboxylic Acid  
Trideceth-15 Carboxylic Acid  
Trideceth-19 Carboxylic Acid  
Trideceth-10 Phosphate  
Tridecylbenzenesulfonic Acid  
Trisodium Lauroampho PG-Acetate Chloride Phosphate  
Undecanoic Acid  
Undeceth-5 Carboxylic Acid

## Surfactants - Emulsifying Agents

Undecylenamidopropylamine Oxide  
Undecylenamidopropyl Betaine  
Undecylenic Acid  
Undecylenoyl Collagen Amino Acids  
Undecylenoyl Hydrolyzed Collagen  
Undecylenoyl Wheat Amino Acids  
Undecyl Glucoside  
Wheat Germ Acid  
Wheat Germamidopropylamine Oxide  
Wheat Germamidopropyl Betaine

## Surfactants - Emulsifying Agents

Surfactants - Emulsifying Agents, are employed in cosmetics to prepare emulsions. The efficacy of emulsifying agents depends on their ability to reduce surface tension, to form complex films on the surface of emulsified droplets, and to create a repulsive barrier on emulsified droplets to prevent their coalescence. *Emulsion Stabilizers* and *Viscosity-Increasing Agents* can be used as auxiliary emulsifiers to facilitate the process of emulsification or to retard physical changes in emulsions throughout their shelf-life. Ingredients listed as *Surfactants - Cleansing Agents* also function as emulsifying agents, but are not included in the following listing.

The following listing generally includes *Surfactants - Cleansing Agents*. Surfactant-type cleansers are widely used as emulsifiers; they are excluded here only to reduce unnecessary duplication.

Abletic Acid  
Almond Oil PEG-6 Esters  
Ammonium Coco-Sulfate  
Apricot Kernel Oil PEG-6 Esters  
Arachideth-20  
Avocado Oil PEG-11 Esters  
Beeswax  
Beeswax Acid  
Beheneth-5  
Beheneth-10  
Beheneth-20  
Butylglucoside Caprate  
Butyloctanoic Acid  
C18-36 Acid Glycol Ester  
C12-20 Acid PEG-8 Ester  
Calcium Stearoyl Lactylate  
C9-16 Alkanes/Cycloalkanes  
C9-15 Alkyl Phosphate  
Canola Oil Glyceride  
Capryleth-4  
Caprylic/Capric Triglyceride PEG-4 Esters  
Ceteareth-2  
Ceteareth-3  
Ceteareth-4  
Ceteareth-5  
Ceteareth-6  
Ceteareth-7  
Ceteareth-8  
Ceteareth-9  
Ceteareth-10  
Ceteareth-11  
Ceteareth-12

Ceteareth-13  
Ceteareth-14  
Ceteareth-15  
Ceteareth-16  
Ceteareth-17  
Ceteareth-18  
Ceteareth-22  
Ceteareth-60 Myristyl Glycol  
Cetearyl Glucoside  
Ceteth-1  
Ceteth-2  
Ceteth-3  
Ceteth-4  
Ceteth-5  
Ceteth-6  
Ceteth-10  
Ceteth-12  
Ceteth-14  
Ceteth-15  
Ceteth-16  
Cetethyl Morpholinium Ethosulfate  
Cetoleth-6  
Cetoleth-10  
Cetoleth-11  
Cetoleth-15  
Cetoleth-20  
Cetrimonium Bromide  
Cetrimonium Chloride  
Cetrimonium Methosulfate  
Cetrimonium Tosylate  
Cetyl Alcohol  
Cetyl Dimethicone Copolyol

Cetyl Glyceryl Ether/Glycerin Copolymer  
Cetyl Phosphate  
Choleth-10  
Choleth-15  
Choleth-20  
Choleth-24  
Coceth-3  
Coceth-5  
Coceth-6  
Coceth-7  
Coceth-8  
Coceth-10  
Cocoyl Ethyl Glucoside  
Corn Glycerides  
Corn Oil PEG-6 Esters  
Corn Oil PEG-8 Esters  
Cottonseed Glyceride  
C9-11 Pareth-3  
C9-11 Pareth-6  
C9-11 Pareth-8  
C11-15 Pareth-3  
C11-15 Pareth-5  
C11-15 Pareth-7  
C11-15 Pareth-9  
C11-15 Pareth-12  
C11-15 Pareth-15  
C11-15 Pareth-20  
C11-21-Pareth-3  
C11-21-Pareth-10  
C12-13 Pareth-2  
C12-13 Pareth-3  
C12-13 Pareth-4

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## Surfactants - Emulsifying Agents (Cont.)

C12-13 Pareth-5	Di-C12-15 Pareth-6 Phosphate	Glyceryl Isostearates
C12-13 Pareth-7	Di-C12-15 Pareth-8 Phosphate	Glyceryl Isotridecanoate/Stearate/Adipate
C12-13 Pareth-9	Diethylaminoethyl Cocoate	Glyceryl Lanolate
C12-13 Pareth-10	Diethylaminoethyl PEG-5 Cocoate	Glyceryl Laurate
C12-13 Pareth-15	Diethylaminoethyl PEG-5 Laurate	Glyceryl Laurate SE
C12-14 Pareth-3	Diethylaminoethyl Stearate	Glyceryl Laurate/Oleate
C12-14 Pareth-7	Dihydrocholeth-15	Glyceryl Linoleate
C12-14 Pareth-12	Dihydrocholeth-20	Glyceryl Linolenate
C12-15 Pareth-2	Dihydrocholeth-30	Glyceryl Montanate
C12-15 Pareth-3	Dihydrogenated Tallow Phthalic Acid Amide	Glyceryl Myristate
C12-15 Pareth-4	Dilaureth-7 Citrate	Glyceryl Oleate
C12-15 Pareth-5	Dilaureth-4 Phosphate	Glyceryl Oleate SE
C12-15 Pareth-7	Dilaureth-10 Phosphate	Glyceryl Oleate/Elaidate
C12-15 Pareth-9	Dimethicone Copolyol Acetate	Glyceryl Palmitate
C12-15 Pareth-10	Dimethicone Copolyol Adipate	Glyceryl Palmitate/Stearate
C12-15 Pareth-11	Dimethicone Copolyol Butyl Ether	Glyceryl Palmitoleate
C12-15 Pareth-12	Dimethicone Copolyol Ethyl Ether	Glyceryl Pentadecanoate
C14-15 Pareth-4	Dimethicone Copolyol Methyl Ether	Glyceryl Ricinoleate
C14-15 Pareth-7	Dimethicone Copolyol Phosphate	Glyceryl Ricinoleate SE
C14-15 Pareth-11	Dimethicone Copolyol Undecylenate	Glyceryl Rosinate
C14-15 Pareth-12	Dimethyl Octynediol	Glyceryl/Sorbitol Oleate/Hydroxystearate
C14-15 Pareth-13	Dimyristyl Phosphate	Glyceryl Stearate
C20-40 Pareth-3	Dinonoxynol-9 Citrate	Glyceryl Stearate SE
C20-40 Pareth-10	Dinonoxynol-4 Phosphate	Glyceryl Stearate/Maleate
C30-50 Pareth-3	Dioleoyl Edetolmonium Methosulfate	Glyceryl Tallowate
C30-50 Pareth-10	Dioleth-8 Phosphate	Glyceryl Undecylenate
C40-60 Pareth-3	Disodium Cetearyl Sulfosuccinate	Glycol Octanoate
C40-60 Pareth-10	Disodium Cetyl Phenyl Ether Disulfonate	Glycol Stearate SE
C12-13 Pareth-10 Phosphate	Disodium Coco-Glucoside Citrate	Hexyldeceth-2
C12-15 Pareth-2 Phosphate	Disodium Coco-Glucoside Sulfosuccinate	Hexyldeceth-20
C12-15 Pareth-8 Phosphate	Disodium Decyl Phenyl Ether Disulfonate	Hydrogenated Castor Oil PEG-8 Esters
C12-15 Pareth-10 Phosphate	Disodium Laureth-7 Citrate	Hydrogenated Cottonseed Glyceride
C12-16 Pareth-6 Phosphate	Disodium Lauryl Phenyl Ether Disulfonate	Hydrogenated Laneth-5
C11-15 Sec-Pareth-12	Disodium Lauryl Phosphate	Hydrogenated Laneth-20
DATEM	Disodium Oleyl Phosphate	Hydrogenated Lard Glyceride
DEA-Ceteareth-2 Phosphate	Disodium PEG-8 Glyceryl Caprylate/Caprates	Hydrogenated Lecithin
DEA-Cetyl Phosphate	Disodium PEG-5 Laurylcitrate Sulfosuccinate	Hydrogenated Palm Acid
DEA-C8-18 Perfluoroalkylethyl Phosphate	Disodium PEG-8 Ricinosuccinate	Hydrogenated Palm Glyceride
DEA-Oleth-3 Phosphate	Disodium Sitostereth-14 Sulfosuccinate	Hydrogenated Palm/Palm Kernel Oil PEG-6 Esters
DEA-Oleth-5 Phosphate	Dodecylhexadecyltrimonium Chloride	Hydrogenated Soy Glyceride
DEA-Oleth-10 Phosphate	Dodoxynol-5	Hydrogenated Talloweth-12
DEA-Oleth-20 Phosphate	Dodoxynol-6	Hydrogenated Talloweth-60 Myristyl Glycol
DEA-Perfluoropolymethylisopropeth Phosphate	Dodoxynol-7	Hydrogenated Tallow Glyceride
Deceth-3	Dodoxynol-9	Hydrogenated Vegetable Glyceride
Deceth-4	Dodoxynol-12	Hydrogenated Vegetable Glycerides Citrate
Deceth-5	Dodoxynol-13	Hydrogenated Vegetable Glycerides Phosphate
Deceth-6	Glycereth-17 Cocoate	Hydrolyzed Beeswax
Deceth-8	Glycereth-6 Laurate	Hydroxycetyl Phosphate
Deceth-10	Glycereth-20 Stearate	Hydroxyethyl Glyceryl Oleate/Stearate
Deceth-4 Phosphate	Glycereth-17 Tallowate	Hydroxylated Lecithin
Deceth-6 Phosphate	Glyceryl Arachidate	Isoceteareth-8 Stearate
Dextrin Behenate	Glyceryl Behenate	Isoceteth-10
Dextrin Laurate	Glyceryl Caprate	Isoceteth-20
Dextrin Myristate	Glyceryl Caprylate	Isoceteth-10 Stearate
Dextrin Palmitate	Glyceryl Caprylate/Caprates	Isodeceth-4
Dextrin Stearate	Glyceryl Cocoate	Isodeceth-5
Diammonium Dimethicone Copolyol Sulfosuccinate	Glyceryl Erucate	Isodeceth-6
Diceteareth-10 Phosphate	Glyceryl Hydrogenated Rosinate	Isolaureth-3
Dicetyl Phosphate	Glyceryl Hydroxystearate	Isolaureth-6
Di-C12-15 Pareth-2 Phosphate	Glyceryl Isopalmitate	Isolaureth-10
Di-C12-15 Pareth-4 Phosphate	Glyceryl Isostearate	Isosteareth-2
	Glyceryl Isostearate/Myristate	

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Isosteareth-3	Myristoyl Methylalanine	Oleth-20
Isosteareth-10	Noneth-8	Oleth-2 Phosphate
Isosteareth-12	Nonoxynol-1	Oleth-3 Phosphate
Isosteareth-20	Nonoxynol-2	Oleth-4 Phosphate
Isosteareth-6 Carboxylic Acid	Nonoxynol-3	Oleth-5 Phosphate
Isosteareth-11 Carboxylic Acid	Nonoxynol-4	Oleth-10 Phosphate
Isosteareth-2 Phosphate	Nonoxynol-5	Oleth-20 Phosphate
Isosteareth-10 Stearate	Nonoxynol-6	Oleyl Ethyl Phosphate
Laneth-5	Nonoxynol-7	Oleyl Phosphate
Laneth-10	Nonoxynol-8	Olive Oil PEG-6 Esters
Laneth-15	Nonoxynol-9	Olive Oil PEG-10 Esters
Laneth-16	Nonoxynol-10	Palm Acid
Laneth-4 Phosphate	Nonoxynol-11	Palm Glyceride
Lanolin	Nonoxynol-12	Palmitic Acid
Laureth-1	Nonoxynol-13	Palmitoyl Inulin
Laureth-2	Nonoxynol-14	Palm Kernel Acid
Laureth-3	Nonoxynol-15	Peanut Oil PEG-6 Esters
Laureth-4	Nonoxynol-18	PEG-6 Almond Glycerides
Laureth-5	Nonoxynol-20	PEG-20 Almond Glycerides
Laureth-6	Nonoxynol-6 Phosphate	PEG-35 Almond Glycerides
Laureth-7	Nonoxynol-9 Phosphate	PEG-60 Almond Glycerides
Laureth-8	Nonoxynol-10 Phosphate	PEG-11 Avocado Glycerides
Laureth-9	Nonyl Nonoxynol-5	PEG-14 Avocado Glycerides
Laureth-10	Nonyl Nonoxynol-10	PEG-11 Babassu Glycerides
Laureth-11	Nonyl Nonoxynol-7 Phosphate	PEG-42 Babassu Glycerides
Laureth-12	Nonyl Nonoxynol-9 Phosphate	PEG-6 Beeswax
Laureth-13	Nonyl Nonoxynol-10 Phosphate	PEG-8 Beeswax
Laureth-14	Octoxyglyceryl Behenate	PEG-12 Beeswax
Laureth-15	Octoxyglyceryl Palmitate	PEG-20 Beeswax
Laureth-16	Octoxynol-1	PEG-8 Behenate
Laureth-3 Carboxylic Acid	Octoxynol-3	PEG-75 Beta-Sitosterol
Lauroyl Ethyl Glucoside	Octoxynol-5	PEG-8 Caprate
Lauroyl Lactic Acid	Octoxynol-7	PEG-8 Caprylate
Laurtrimonium Chloride	Octoxynol-8	PEG-8 Caprylate/Caprate
Laurylmethicone Copolyol	Octoxynol-9	PEG-6 Caprylic/Capric Glycerides
Lauryl Phosphate	Octoxynol-10	PEG-8 Caprylic/Capric Glycerides
Lauryl Polyglyceryl-6 Cetearyl Glycol Ether	Octoxynol-11	PEG-2 Castor Oil
Lecithin	Octoxynol-12	PEG-3 Castor Oil
Magnesium PEG-3 Cocamide Sulfate	Octoxynol-13	PEG-4 Castor Oil
Mango Seed Oil PEG-70 Esters	Octoxynol-16	PEG-5 Castor Oil
Mannitan Laurate	Octoxynol-20	PEG-8 Castor Oil
Mannitan Oleate	Octoxynol-9 Carboxylic Acid	PEG-9 Castor Oil
MEA-Dicetearyl Phosphate	Octyl Dimethicone Ethoxy Glucoside	PEG-10 Castor Oil
Meroxapol 105	Octyldodeceth-2	PEG-11 Castor Oil
Meroxapol 108	Octyldodeceth-5	PEG-15 Castor Oil
Meroxapol 174	Octyldodeceth-10	PEG-16 Castor Oil
Meroxapol 251	Octyldodeceth-16	PEG-20 Castor Oil
Meroxapol 252	Octyldodeceth-20	PEG-25 Castor Oil
Meroxapol 311	Oleoyl Ethyl Glucoside	PEG-26 Castor Oil
Meroxapol 312	Oleth-2	PEG-29 Castor Oil
Methylglucose Dioleate/Hydroxystearate	Oleth-3	PEG-30 Castor Oil
Mink Oil PEG-13 Esters	Oleth-4	PEG-33 Castor Oil
Myreth-2	Oleth-5	PEG-35 Castor Oil
Myreth-3	Oleth-6	PEG-36 Castor Oil
Myreth-4	Oleth-7	PEG-8 C12-18 Ester
Myreth-5	Oleth-8	PEG-3 Cocamide
Myreth-10	Oleth-9	PEG-5 Cocamide
Myreth-3 Carboxylic Acid	Oleth-10	PEG-6 Cocamide
Myristamidopropyl Dimethylamine Dimethicone	Oleth-11	PEG-7 Cocamide
Copolyol Phosphate	Oleth-12	PEG-11 Cocamide
Myristoyl Ethyl Glucoside	Oleth-15	PEG-20 Cocamide
Myristoyl Lactic Acid	Oleth-16	PEG-2 Cocamine

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## Surfactants - Emulsifying Agents (Cont.)

PEG-3 Cocamine	PEG-15 Glyceryl Oleate	PEG-10 Lanolate
PEG-5 Cocamine	PEG-20 Glyceryl Oleate	PEG-12 Lanolate
PEG-10 Cocamine	PEG-18 Glyceryl Oleate/Cocoate	PEG-15 Lanolate
PEG-15 Cocamine	PEG-15 Glyceryl Ricinoleate	PEG-20 Lanolate
PEG-20 Cocamine	PEG-20 Glyceryl Ricinoleate	PEG-5 Lanolin
PEG-15 Cocamine Oleate/Phosphate	PEG-5 Glyceryl Sesquioleate	PEG-10 Lanolin
PEG-11 Cocoa Butter Glycerides	PEG-5 Glyceryl Stearate	PEG-20 Lanolin
PEG-75 Cocoa Butter Glycerides	PEG-10 Glyceryl Stearate	PEG-24 Lanolin
PEG-5 Cocoate	PEG-20 Glyceryl Stearate	PEG-27 Lanolin
PEG-8 Cocoate	PEG-5 Glyceryl Triisostearate	PEG-30 Lanolin
PEG-9 Cocoate	PEG-15 Glyceryl Trioleate	PEG-40 Lanolin
PEG-10 Cocoate	PEG-25 Glyceryl Trioleate	PEG-75 Lanolin Wax
PEG-15 Cocoate	PEG-140 Glyceryl Tristearate	PEG-3 Lauramide
PEG-9 Cocoglycerides	PEG-20 Hexadecenylsuccinate	PEG-5 Lauramide
PEG-10 Coconut Oil Esters	PEG-2 Hydrogenated Castor Oil	PEG-6 Lauramide
PEG-15 Cocopolyamine	PEG-5 Hydrogenated Castor Oil	PEG-2 Laurate
PEG-20 Corn Glycerides	PEG-6 Hydrogenated Castor Oil	PEG-2 Laurate SE
PEG-60 Corn Glycerides	PEG-7 Hydrogenated Castor Oil	PEG-4 Laurate
PEG-8 Dicocoate	PEG-10 Hydrogenated Castor Oil	PEG-6 Laurate
PEG-4 Diheptanoate	PEG-16 Hydrogenated Castor Oil	PEG-8 Laurate
PEG-2 Diisononanoate	PEG-20 Hydrogenated Castor Oil	PEG-9 Laurate
PEG-8 Diisostearate	PEG-25 Hydrogenated Castor Oil	PEG-10 Laurate
PEG-2 Dilaurate	PEG-30 Hydrogenated Castor Oil	PEG-12 Laurate
PEG-4 Dilaurate	PEG-35 Hydrogenated Castor Oil	PEG-14 Laurate
PEG-6 Dilaurate	PEG-40 Hydrogenated Castor Oil	PEG-6 Laurate/Tartarate
PEG-8 Dilaurate	PEG-20 Hydrogenated Castor Oil Isostearate	PEG-8 Linoleate
PEG-12 Dilaurate	PEG-50 Hydrogenated Castor Oil Isostearate	PEG-8 Linolenate
PEG-20 Dilaurate	PEG-50 Hydrogenated Castor Oil Succinate	PEG-20 Mannitan Laurate
PEG-32 Dilaurate	PEG-20 Hydrogenated Castor Oil Triisostearate	PEG-75 Meadowfoam Oil
PEG-2 Dioctanoate	PEG-5 Hydrogenated Corn Glycerides	PEG-20 Methyl Glucose Distearate
PEG-4 Dioleate	PEG-8 Hydrogenated Fish Glycerides	PEG-20 Methyl Glucose Sesquicaprylate/ Sesquicaprate
PEG-6 Dioleate	PEG-5 Hydrogenated Lanolin	PEG-20 Methyl Glucose Sesquilaurate
PEG-8 Dioleate	PEG-10 Hydrogenated Lanolin	PEG-20 Methyl Glucose Sesquistearate
PEG-10 Dioleate	PEG-20 Hydrogenated Lanolin	PEG-13 Mink Glycerides
PEG-12 Dioleate	PEG-24 Hydrogenated Lanolin	PEG-8 Myristate
PEG-20 Dioleate	PEG-20 Hydrogenated Palm Glycerides	PEG-20 Myristate
PEG-32 Dioleate	PEG-13 Hydrogenated Tallow Amide	PEG-4 Octanoate
PEG-3 Dipalmitate	PEG-8 Hydrogenated Tallow Amine	PEG-5 Octanoate
PEG-13 Diphenylol Propane	PEG-10 Hydrogenated Tallow Amine	PEG-13 Octanoate
PEG-30 Dipolyhydroxystearate	PEG-15 Hydrogenated Tallow Amine	PEG-3 Oleamide
PEG-2 Distearate	PEG-20 Hydrogenated Tallow Amine	PEG-4 Oleamide
PEG-3 Distearate	PEG-15 Hydroxystearate	PEG-5 Oleamide
PEG-4 Distearate	PEG-6 Isolauryl Thioether	PEG-6 Oleamide
PEG-6 Distearate	PEG-8 Isolauryl Thioether	PEG-7 Oleamide
PEG-8 Distearate	PEG-10 Isolauryl Thioether	PEG-9 Oleamide
PEG-9 Distearate	PEG-6 Isopalmitate	PEG-2 Oleamine
PEG-12 Distearate	PEG-4 Isostearate	PEG-5 Oleamine
PEG-20 Distearate	PEG-6 Isostearate	PEG-15 Oleamine
PEG-32 Distearate	PEG-8 Isostearate	PEG-2 Oleate
PEG-8 Ditallate	PEG-10 Isostearate	PEG-2 Oleate SE
PEG-12 Ditallate	PEG-12 Isostearate	PEG-3 Oleate
PEG-8 Di/Tricinoleate	PEG-15 Jojoba Acid	PEG-4 Oleate
PEG-60 Evening Primrose Glycerides	PEG-26 Jojoba Acid	PEG-5 Oleate
PEG-7 Glyceryl Cocoate	PEG-40 Jojoba Acid	PEG-6 Oleate
PEG-12 Glyceryl Dioleate	PEG-15 Jojoba Alcohol	PEG-7 Oleate
PEG-15 Glyceryl Isostearate	PEG-26 Jojoba Alcohol	PEG-8 Oleate
PEG-20 Glyceryl Isostearate	PEG-3 Lanolate	PEG-9 Oleate
PEG-8 Glyceryl Laurate	PEG-4 Lanolate	PEG-10 Oleate
PEG-12 Glyceryl Laurate	PEG-5 Lanolate	PEG-11 Oleate
PEG-15 Glyceryl Laurate	PEG-6 Lanolate	PEG-12 Oleate
PEG-20 Glyceryl Laurate	PEG-7 Lanolate	PEG-14 Oleate
PEG-10 Glyceryl Oleate	PEG-8 Lanolate	

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PEG-15 Oleate	PEG-75 Soy Glycerides	Poloxamer 331
PEG-16 Oleate	PEG-5 Soy Sterol	Poloxamer 333
PEG-20 Oleate	PEG-10 Soy Sterol	Poloxamer 401
PEG-4 Olivat	PEG-16 Soy Sterol	Poloxamer 402
PEG-2 Olive Glycerides	PEG-25 Soy Sterol	Poloxamer 403
PEG-6 Olive Glycerides	PEG-30 Soy Sterol	Poloxamer 407
PEG-10 Olive Glycerides	PEG-4 Stearamide	Poloxamer 105 Benzoate
PEG-40 Olive Glycerides	PEG-5 Stearamine	Poloxamine 304
PEG-18 Palm Glycerides	PEG-10 Stearamine	Poloxamine 504
PEG-6 Palmitate	PEG-15 Stearamine	Poloxamine 701
PEG-18 Palmitate	PEG-2 Stearate	Poloxamine 702
PEG-20 Palmitate	PEG-2 Stearate SE	Poloxamine 704
PEG-12 Palm Kernel Glycerides	PEG-3 Stearate	Poloxamine 707
PEG-45 Palm Kernel Glycerides	PEG-4 Stearate	Poloxamine 901
PEG-25 Phytosterol	PEG-5 Stearate	Poloxamine 904
PEG-4 Polyglyceryl-2 Distearate	PEG-6 Stearate	Poloxamine 1101
PEG-10 Polyglyceryl-2 Laurate	PEG-7 Stearate	Poloxamine 1102
PEG-4 Polyglyceryl-2 Stearate	PEG-8 Stearate	Poloxamine 1104
PEG-4 PPG-7 C13/C15 Alcohol	PEG-9 Stearate	Poloxamine 1301
PEG/PPG-150/30 Copolymer	PEG-10 Stearate	Poloxamine 1302
PEG-3/PPG-2 Glyceryl/Sorbitol Hydroxystearate/ Isostearate	PEG-12 Stearate	Poloxamine 1304
PEG-20-PPG-10 Glyceryl Stearate	PEG-14 Stearate	Poloxamine 1307
PEG-4 Proline Linoleate	PEG-18 Stearate	Poloxamine 1501
PEG-4 Proline Linolenate	PEG-20 Stearate	Poloxamine 1502
PEG-8 Propylene Glycol Cocoate	PEG-6 Stearylguanidine	Poloxamine 1504
PEG-4 Rapeseedamide	PEG-2 Sunflower Glycerides	Polyglyceryl-3 Beeswax
PEG-2 Ricinoleate	PEG-10 Sunflower Glycerides	Polyglyceryl-2 Caprate
PEG-7 Ricinoleate	PEG-13 Sunflower Glycerides	Polyglyceryl-3 Caprate
PEG-8 Ricinoleate	PEG-4 Tallate	Polyglyceryl-4 Caprate
PEG-9 Ricinoleate	PEG-5 Tallate	Polyglyceryl-2 Caprylate
PEG-45 Safflower Glycerides	PEG-8 Tallate	Polyglyceryl-3 Cetyl Ether
PEG-8 Sesqu Laurate	PEG-10 Tallate	Polyglyceryl-3 Cocoate
PEG-8 Sesqu oleate	PEG-12 Tallate	Polyglyceryl-4 Cocoate
PEG-50 Shea Butter	PEG-14 Tallate	Polyglyceryl-10 Decalinoate
PEG-60 Shea Butter Glycerides	PEG-15 Tallate	Polyglyceryl-10 Decaoleate
PEG-6 Sorbitan Beeswax	PEG-16 Tallate	Polyglyceryl-10 Decastearate
PEG-8 Sorbitan Beeswax	PEG-20 Tallate	Polyglyceryl-3 Decyltetradecyl Ether
PEG-20 Sorbitan Beeswax	PEG-5 Tallow Amide	Polyglyceryl-3 Dicaprate
PEG-40 Sorbitan Diisostearate	PEG-8 Tallow Amide	Polyglyceryl-3 Dicoate
PEG-2 Sorbitan Isostearate	PEG-20 Tallowate	Polyglyceryl-10 Didecanoate
PEG-5 Sorbitan Isostearate	PEG-5 Tricapryl Citrate	Polyglyceryl-2 Diisostearate
PEG-20 Sorbitan Isostearate	PEG-5 Tricetyl Citrate	Polyglyceryl-3 Diisostearate
PEG-3 Sorbitan Oleate	PEG-5 Trilauryl Citrate	Polyglyceryl-10 Diisostearate
PEG-6 Sorbitan Oleate	PEG-5 Trimyristyl Citrate	Polyglyceryl-4 Dilaurate
PEG-40 Sorbitan Perisostearate	PEG-5 Tristearyl Citrate	Polyglyceryl Dimer Soyate
PEG-40 Sorbitan Peroleate	PEG-6 Undecylenate	Polyglyceryl-2 Dioleate
PEG-3 Sorbitan Stearate	PEG-8 Undecylenate	Polyglyceryl-3 Dioleate
PEG-6 Sorbitan Stearate	Pelargonic Acid	Polyglyceryl-6 Dioleate
PEG-30 Sorbitan Tetraoleate	Pentaerythrityl Stearate	Polyglyceryl-10 Dioleate
PEG-40 Sorbitan Tetraoleate	Phosphatidylcholine	Polyglyceryl-6 Dipalmitate
PEG-60 Sorbitan Tetraoleate	Poloxamer 101	Polyglyceryl-10 Dipalmitate
PEG-60 Sorbitan Tetrastearate	Poloxamer 105	Polyglyceryl-2 Distearate
PEG-20 Sorbitan Triisostearate	Poloxamer 122	Polyglyceryl-3 Distearate
PEG-40 Sorbitol Hexaoleate	Poloxamer 123	Polyglyceryl-6 Distearate
PEG-50 Sorbitol Hexaoleate	Poloxamer 124	Polyglyceryl-10 Distearate
PEG-30 Sorbitol Tetraoleate Laurate	Poloxamer 181	Polyglyceryl-10 Heptaoleate
PEG-60 Sorbitol Tetrastearate	Poloxamer 185	Polyglyceryl-10 Heptastearate
PEG-5 Soyamine	Poloxamer 212	Polyglyceryl-6 Hexaoleate
PEG-8 Soyamine	Poloxamer 215	Polyglyceryl-10 Hexaoleate
PEG-10 Soyamine	Poloxamer 231	Polyglyceryl-3 Hydroxylauryl Ether
PEG-15 Soyamine	Poloxamer 282	Polyglyceryl-2 Isopalmitate
	Poloxamer 284	Polyglyceryl-2 Isostearate

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## Surfactants - Emulsifying Agents (Cont.)

Polyglyceryl-3 Isostearate	Polyglyceryl-6 Tristearate	PPG-2-Ceteth-10
Polyglyceryl-4 Isostearate	Polyglyceryl-10 Tristearate	PPG-2-Ceteth-20
Polyglyceryl-5 Isostearate	Polysorbate 20	PPG-4-Ceteth-1
Polyglyceryl-6 Isostearate	Polysorbate 21	PPG-4-Ceteth-5
Polyglyceryl-10 Isostearate	Polysorbate 40	PPG-4-Ceteth-10
Polyglyceryl-2 Lanolin Alcohol Ether	Polysorbate 60	PPG-4-Ceteth-20
Polyglyceryl-2 Laurate	Polysorbate 61	PPG-5-Ceteth-20
Polyglyceryl-3 Laurate	Polysorbate 65	PPG-8-Ceteth-1
Polyglyceryl-4 Laurate	Polysorbate 80	PPG-8-Ceteth-2
Polyglyceryl-5 Laurate	Polysorbate 81	PPG-8-Ceteth-5
Polyglyceryl-6 Laurate	Polysorbate 85	PPG-8-Ceteth-10
Polyglyceryl-10 Laurate	Polysorbate 80 Acetate	PPG-8-Ceteth-20
Polyglyceryl-4 Lauryl Ether	Potassium Babassuate	PPG-5-Ceteth-10 Phosphate
Polyglyceryl-3 Methylglucose Distearate	Potassium Castorate	PPG-10 Cetyl Ether Phosphate
Polyglyceryl-10 Mono/dioleate	Potassium Cetyl Phosphate	PPG-4 C13-15 Pareth-15
Polyglyceryl-3 Myristate	Potassium Cocoate	PPG-5 C9-15 Pareth-6
Polyglyceryl-10 Myristate	Potassium Cornate	PPG-6 C12-15 Pareth-12
Polyglyceryl-2 Oleate	Potassium Deceth-4 Phosphate	PPG-6 C12-18 Pareth-11
Polyglyceryl-3 Oleate	Potassium Dimethicone Copolyol Phosphate	PPG-2-Deceth-10
Polyglyceryl-4 Oleate	Potassium Isosteareth-2 Phosphate	PPG-4-Deceth-4
Polyglyceryl-5 Oleate	Potassium Laurate	PPG-6-Deceth-4
Polyglyceryl-6 Oleate	Potassium Lauryl Hydroxypropyl Sulfonate	PPG-6-Deceth-9
Polyglyceryl-8 Oleate	Potassium Lauryl Sulfate	PPG-8-Deceth-6
Polyglyceryl-10 Oleate	Potassium Linoleate	PPG-6-Decyltetradeceth-12
Polyglyceryl-2 Oleyl Ether	Potassium Myristate	PPG-6-Decyltetradeceth-20
Polyglyceryl-4 Oleyl Ether	Potassium Octoxynol-12 Phosphate	PPG-6-Decyltetradeceth-30
Polyglyceryl-3 Palmitate	Potassium Oleate	PPG-13-Decyltetradeceth-24
Polyglyceryl-6 Palmitate	Potassium Oliviate	PPG-20-Decyltetradeceth-10
Polyglyceryl-4-PEG-2 Cocamide	Potassium Palmate	PPG-24-Glycereth-24
Polyglyceryl-2-PEG-4 Stearate	Potassium Palmitate	PPG-66-Glycereth-12
Polyglyceryl-10 Pentalaurate	Potassium Peanutate	PPG-10 Glyceryl Ether
Polyglyceryl-10 Pentalinoleate	Potassium Rapeseedate	PPG-27 Glyceryl Ether
Polyglyceryl-4 Pentaoleate	Potassium Ricinoleate	PPG-2 Isoceteth-20 Acetate
Polyglyceryl-6 Pentaoleate	Potassium Soyate	PPG-2-Isodeceth-4
Polyglyceryl-10 Pentaoleate	Potassium Stearate	PPG-2-Isodeceth-6
Polyglyceryl-3 Pentaricinoleate	Potassium Tallate	PPG-2-Isodeceth-9
Polyglyceryl-6 Pentaricinoleate	Potassium Tallowate	PPG-2-Isodeceth-12
Polyglyceryl-10 Pentaricinoleate	Potassium Undecylenate	PPG-3-Isosteareth-9
Polyglyceryl-4 Pentastearate	PPG-2-Buteth-2	PPG-4 Jojoba Acid
Polyglyceryl-6 Pentastearate	PPG-4-Buteth-4	PPG-4 Jojoba Alcohol
Polyglyceryl-10 Pentastearate	PPG-5-Buteth-5	PPG-10 Jojoba Alcohol
Polyglyceryl-3 Polyricinoleate	PPG-7-Buteth-10	PPG-12-Laneth-50
Polyglyceryl-6 Polyricinoleate	PPG-9-Buteth-12	PPG-3-Laureth-9
Polyglyceryl-10 Polyricinoleate	PPG-10-Buteth-9	PPG-4-Laureth-2
Polyglyceryl-3 Ricinoleate	PPG-12-Buteth-12	PPG-4-Laureth-5
Polyglyceryl-2 Sesquiosostearate	PPG-12-Buteth-16	PPG-4-Laureth-7
Polyglyceryl-2 Sesquioleate	PPG-15-Buteth-20	PPG-5-Laureth-5
Polyglyceryl-2 Sesquisteate	PPG-17-Buteth-17	PPG-6-Laureth-3
Polyglyceryl-3 Stearate SE	PPG-20-Buteth-30	PPG-25-Laureth-25
Polyglyceryl-2 Stearate	PPG-24-Buteth-27	PPG-7-Lauryl Ether
Polyglyceryl-3 Stearate	PPG-26-Buteth-26	PPG-3-Myreth-3
Polyglyceryl-4 Stearate	PPG-28-Buteth-35	PPG-3-Myreth-11
Polyglyceryl-8 Stearate	PPG-25 Butyl Ether Phosphate	PPG-2-PEG-6 Coconut Oil Esters
Polyglyceryl-10 Stearate	PPG-2-Ceteareth-9	PPG-20-PEG-20 Hydrogenated Lanolin
Polyglyceryl-2 Tetraiosostearate	PPG-4-Ceteareth-12	PPG-2-PEG-11 Hydrogenated Lauryl Alcohol Ether
Polyglyceryl-6 Tetraoleate	PPG-10-Ceteareth-20	PPG-12-PEG-50 Lanolin
Polyglyceryl-10 Tetraoleate	PPG-1-Ceteth-1	PPG-12-PEG-65 Lanolin Oil
Polyglyceryl-2 Tetrastearate	PPG-1-Ceteth-5	PPG-40-PEG-60 Lanolin Oil
Polyglyceryl-2 Triisostearate	PPG-1-Ceteth-10	PPG-1-PEG-9 Lauryl Glycol Ether
Polyglyceryl-3 Triisostearate	PPG-1-Ceteth-20	PPG-3-PEG-6 Oleyl Ether
Polyglyceryl-10 Trioleate	PPG-2-Ceteth-1	PPG-23-PEG-4 Trimethylolpropane
Polyglyceryl-4 Tristearate	PPG-2-Ceteth-5	

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PPG-68-PEG-10 Trimethylolpropane	Sodium Olivale	Sucrose Distearate
PPG-8 Polyglyceryl-2 Ether	Sodium Palmate	Sucrose Laurate
PPG-23-Steareth-34	Sodium Palmitate	Sucrose Myristate
PPG-1 Trideceth-6	Sodium Palm Kernelate	Sucrose Oleate
PPG-4 Trideceth-6	Sodium Peanutate	Sucrose Palmitate
Propylene Glycol Behenate	Sodium Phthalate Stearyl Amide	Sucrose Polybehenate
Propylene Glycol Capreth-4	Sodium Rapeseedate	Sucrose Polycottonseedate
Propylene Glycol Caprylate	Sodium Ricinoleate	Sucrose Polyaurate
Propylene Glycol Cocoate	Sodium Soyate	Sucrose Polylinoleate
Propylene Glycol Hydroxystearate	Sodium Stearate	Sucrose Polyoleate
Propylene Glycol Isodeceth-4	Sodium Steareth-4 Phosphate	Sucrose Polypalmate
Propylene Glycol Isodeceth-12	Sodium Stearoyl Lactylate	Sucrose Polysoyate
Propylene Glycol Isostearate	Sodium Stearyl Sulfate	Sucrose Polystearate
Propylene Glycol Laurate	Sodium Trideceth Sulfate	Sucrose Ricinoleate
Propylene Glycol Laureth-6	Sodium Tridecyl Sulfate	Sucrose Stearate
Propylene Glycol Linoleate	Sodium Undecylenate	Sunflower Seed Oil Glyceride
Propylene Glycol Linolenate	Sorbeth-2 Cocoate	Tall Oil Acid
Propylene Glycol Myristate	Sorbeth-6 Hexastearate	Tallow Acid
Propylene Glycol Oleate	Sorbeth-3 Isostearate	Talloweth-6
Propylene Glycol Oleate SE	Sorbitan Caprylate	Tallow Glyceride
Propylene Glycol Oleth-5	Sorbitan Cocoate	TEA-Canolate
Propylene Glycol Ricinoleate	Sorbitan Diisostearate	TEA-Dimethicone Copolyol Phosphate
Propylene Glycol Soyate	Sorbitan Dioleate	TEA-Isostearate
Propylene Glycol Stearate	Sorbitan Distearate	TEA-Laneth-5 Sulfate
Propylene Glycol Stearate SE	Sorbitan Isostearate	TEA-Laurate
Raffinose Myristate	Sorbitan Laurate	TEA-Lauroyl Lactylate
Raffinose Oleate	Sorbitan Oleate	TEA-Myristate
Rapeseed Glyceride	Sorbitan Olivale	TEA-Oleate
Safflower Glyceride	Sorbitan Palmitate	TEA-Oleyl Sulfate
Sodium Babassuate	Sorbitan Sesquiosostearate	TEA-Palmitate
Sodium Beeswax	Sorbitan Sesquioleate	TEA-Stearate
Sodium Behenoyl Lactylate	Sorbitan Sesquisteate	TEA-Tallate
Sodium Caproyl Lactylate	Sorbitan Stearate	TIPA-Stearate
Sodium Caprylate	Sorbitan Triisostearate	Triceteareth-4 Phosphate
Sodium Capryleth-9 Carboxylate	Sorbitan Trioleate	Triceteth-5 Phosphate
Sodium Castorate	Sorbitan Tristearate	Trideceth-2
Sodium Ceteth-13 Carboxylate	Soy Acid	Trideceth-3
Sodium Coceth Sulfate	Steareth-2	Trideceth-5
Sodium Cocoate	Steareth-3	Trideceth-6
Sodium Coco-Glucoside Tartrate	Steareth-4	Trideceth-7
Sodium Coco/Hydrogenated Tallow Sulfate	Steareth-5	Trideceth-8
Sodium Cocoyl Lactylate	Steareth-6	Trideceth-9
Sodium Diceteareth-10 Phosphate	Steareth-7	Trideceth-10
Sodium Isostearate	Steareth-8	Trideceth-11
Sodium Isostearoyl Lactate	Steareth-10	Trideceth-12
Sodium Isostearoyl Lactylate	Steareth-11	Trideceth-15
Sodium Laurate	Steareth-13	Trideceth-20
Sodium Laureth-4 Phosphate	Steareth-14	Trideceth-3 Phosphate
Sodium Laureth Sulfate	Steareth-15	Trideceth-6 Phosphate
Sodium Lauroyl Lactylate	Steareth-16	Trideceth-10 Phosphate
Sodium Lauryl Phosphate	Steareth-20	Triisostearin PEG-6 Esters
Sodium Linoleate	Steareth-21	Trilaneth-4 Phosphate
Sodium/MEA Laureth-2 Sulfosuccinate	Stearic Acid	Trilaureth-4 Phosphate
Sodium Myreth Sulfate	Stearoyl Inulin	Triolein PEG-6 Esters
Sodium Myristate	Stearoyl Lactylic Acid	Trioleth-8 Phosphate
Sodium Oleate	Stearoyl Leucine	Undecanoic Acid
Sodium Oleoyl Lactylate	Stearyl Alcohol	Undeceth-3
Sodium Oleth-7 Phosphate	Sucrose Cocoate	Undeceth-5
Sodium Oleth-8 Phosphate	Sucrose Dilaurate	Undeceth-7

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Undeceth-9  
Undecyleneth-6

Undecylenic Acid  
Vegetable Glycerides Phosphate

Wheat Germ Acid

## Surfactants - Foam Boosters

Surfactants - Foam Boosters, are used in cosmetics to increase the foaming capacity of *Surfactants - Cleansing Agents*, or to stabilize foams in general. Foam boosters are substances which increase the surface viscosity of the liquid which surrounds the individual bubbles in a foam. These agents are commonly used in shaving soaps, shampoos, bubble baths, liquid soaps, mousses, or aerosol-dispensed foams. *Film Formers* or *Viscosity-Increasing Agents* are sometimes used as foam boosters. The listing below is generally limited to foam boosters which can also be classified as surfactants.

- |                                 |   |   |
|---------------------------------|---|---|
| Acetamide MEA                   | Decylamine Oxide  | Disodium Lauryl Sulfosuccinate                            |
| Almondamide DEA                 | Decyl Betaine   | Disodium Myristamido MEA-Sulfosuccinate                   |
| Almondamidopropylamine Oxide    | Decyltetradecylamine Oxide                                | Disodium Nonoxynol-10 Sulfosuccinate                      |
| Almondamidopropyl Betaine       | Diethanolaminoooleamide DEA                               | Disodium Oleamido MEA-Sulfosuccinate                      |
| Apricotamide DEA                | Dihydroxyethyl C8-10 Alkoxypropylamine Oxide              | Disodium Oleamido MIPA-Sulfosuccinate                     |
| Apricotamidopropyl Betaine      | Dihydroxyethyl C9-11 Alkoxypropylamine Oxide              | Disodium Oleamido PEG-2 Sulfosuccinate                    |
| Avocadamide DEA                 | Dihydroxyethyl C12-15 Alkoxypropylamine Oxide             | Disodium Oleoamphodipropionate                            |
| Avocadamidopropyl Betaine       | Dihydroxyethyl Cocamine Oxide                             | Disodium Oleth-3 Sulfosuccinate                           |
| Azelamide MEA                   | Dihydroxyethyl Lauramine Oxide                            | Disodium Oleyl Sulfosuccinate                             |
| Babassuamide DEA                | Dihydroxyethyl Stearamine Oxide                           | Disodium Palmitamido PEG-2 Sulfosuccinate                 |
| Babassuamidopropylamine Oxide   | Dihydroxyethyl Tallowamine Oxide                          | Disodium Palmitoleamido PEG-2 Sulfosuccinate              |
| Babassuamidopropyl Betaine      | Dimethicone Propyl PG-Betaine                             | Disodium PEG-4 Cocamido MIPA-Sulfosuccinate               |
| Behenamide DEA                  | Disodium Caproamphodiacetate                              | Disodium PPG-2-Isodeceth-7                                |
| Behenamide MEA                  | Disodium Caproamphodipropionate                           | Carboxyamphodiacetate                                     |
| Behenamidopropyl Betaine        | Disodium Capryloamphodiacetate                            | Disodium Ricinoleamido MEA-Sulfosuccinate                 |
| Behenamine Oxide                | Disodium Capryloamphodipropionate                         | Disodium Stearamido MEA-Sulfosuccinate                    |
| Behenyl Betaine                 | Disodium Cetearyl Sulfosuccinate                          | Disodium Stearoamphodiacetate                             |
| Canolamidopropyl Betaine        | Disodium Cocamido MIPA-Sulfosuccinate                     | Disodium Stearyl Sulfosuccinate                           |
| Capramide DEA                   | Disodium Cocamido PEG-3 Sulfosuccinate                    | Disodium Stearyl Sulfosuccinate                           |
| Capryl/Capramidopropyl Betaine  | Disodium Cocaminopropyl Iminodiacetate                    | Disodium Tallamido MEA-Sulfosuccinate                     |
| Carnitine                       | Disodium  | Disodium Tallowamido MEA-Sulfosuccinate                   |
| Cetearyl Alcohol                | Cocoamphocarboxyethylhydroxypropylsulfonate               | Disodium Tallowamphodiacetate                             |
| Cetyl Alcohol                   | Disodium Cocoamphodiacetate                               | Disodium Tallow Sulfosuccinate                            |
| Cetyl Betaine                   | Disodium Cocoamphodipropionate                            | Disodium Tridecylsulfosuccinate                           |
| Cocamide DEA                    | Disodium C12-15 Pareth Sulfosuccinate                     | Disodium Undecylenamido MEA-Sulfosuccinate                |
| Cocamide MEA                    | Disodium Deceth-5 Sulfosuccinate                          | Disodium Undecylenamido PEG-2 Sulfosuccinate              |
| Cocamide MIPA                   | Disodium Deceth-6 Sulfosuccinate                          | Disodium Wheat Germamido MEA-Sulfosuccinate               |
| Cocamidoethyl Betaine           | Disodium Hydrogenated Cottonseed Glyceride Sulfosuccinate | Disodium Wheat Germamido PEG-2 Sulfosuccinate             |
| Cocamidopropyl Amine Oxide      | Disodium Isodecyl Sulfosuccinate                          | Disodium Wheatgermamphodiacetate                          |
| Cocamidopropylamine Oxide       | Disodium Isostearamido MEA-Sulfosuccinate                 | Di-TEA-Oleamido PEG-2 Sulfosuccinate                      |
| Cocamidopropyl Betaine          | Disodium Isostearamido MIPA-Sulfosuccinate                | Ditridecyl Sodium Sulfosuccinate                          |
| Cocamidopropyl Hydroxysultaine  | Disodium Isostearoamphodiacetate                          | Erucamidopropyl Hydroxysultaine                           |
| Cocamine Oxide                  | Disodium Isostearoamphodipropionate                       | Hydrogenated Palm Kernel Amine Oxide                      |
| Cocoamphodipropionic Acid       | Disodium Isostearyl Sulfosuccinate                        | Hydrogenated Tallow Alcohol                               |
| Cocobetainamido Amphopropionate | Disodium Laneth-5 Sulfosuccinate                          | Hydrogenated Tallowamide DEA                              |
| Coco-Betaine                    | Disodium Lauramido MEA-Sulfosuccinate                     | Hydrogenated Tallowamine Oxide                            |
| Coco-Hydroxysultaine            | Disodium Lauramido PEG-2 Sulfosuccinate                   | Hydrogenated Tallow Betaine                               |
| Coco-Morpholine Oxide           | Disodium Laureth-5 Carboxyamphodiacetate                  | Hydroxyethyl Carboxymethyl Cocamidopropylamine            |
| Coconut Alcohol                 | Disodium Laureth-6 Sulfosuccinate                         | Hydroxyethyl Hydroxypropyl C12-15 Alkoxypropylamine Oxide |
| Coco/Oleamidopropyl Betaine     | Disodium Laureth-9 Sulfosuccinate                         | Hydroxystearamide MEA                                     |
| Coco-Sultaine                   | Disodium Laureth-12 Sulfosuccinate                        | Isostearamide DEA   |
| Cocoyl Sarcosinamide DEA        | Disodium Lauroamphodiacetate                              |   |
| DEA-Cocoamphodipropionate       | Disodium Lauroamphodipropionate                           |   |
| DEA-Lauraminopropionate         |   |   |
| Decyl Alcohol                   |   |   |

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## Surfactants - Foam Boosters (Cont.)

Isostearamide MEA  
Isostearamide MIPA  
Isostearamidopropylamine Oxide  
Isostearamidopropyl Betaine  
Isostearamidopropyl Morpholine Oxide  
Lactamide MEA  
Lanolinamide DEA  
Lauramide DEA  
Lauramide MEA  
Lauramide MIPA  
Lauramide/Myristamide DEA  
Lauramidopropylamine Oxide  
Lauramidopropyl Betaine  
Lauramine Oxide  
Lauroamphodipropionic Acid  
Lauryl Alcohol  
Lauryl Betaine  
Lauryl Hydroxysultaine  
Lauryl Sultaine  
Lecithinamide DEA  
Linoleamide DEA  
Linoleamide MEA  
Linoleamide MIPA  
Methyl Morpholine Oxide  
Milkamidopropyl Amine Oxide  
Milkamidopropyl Betaine  
Minkamide DEA  
Minkamidopropylamine Oxide  
Minkamidopropyl Betaine  
Myristamide DEA  
Myristamide MEA  
Myristamide MIPA  
Myristamidopropylamine Oxide  
Myristamidopropyl Betaine  
Myristamine Oxide  
Myristaminopropionic Acid  
Myristyl Alcohol  
Myristyl Betaine  
Myristyl/Cetyl Amine Oxide  
Oleamide DEA  
Oleamide MEA  
Oleamide MIPA  
Oleamidopropylamine Oxide  
Oleamidopropyl Betaine  
Oleamidopropyl Hydroxysultaine  
Oleamine Oxide  
Oleyl Betaine  
Olivamide DEA  
Olivamidopropylamine Oxide  
Olivamidopropyl Betaine  
Palamide DEA  
Palamide MEA  
Palamide MIPA

Palamidopropyl Betaine  
Palmitamide DEA  
Palmitamide MEA  
Palmitamidopropylamine Oxide  
Palmitamidopropyl Betaine  
Palmitamine Oxide  
Palm Kernel Alcohol  
Palm Kernelamide DEA  
Palm Kernelamide MEA  
Palm Kernelamide MIPA  
Palm Kernelamidopropyl Betaine  
Peanutamide MEA  
Peanutamide MIPA  
PEG-3 Cocamide  
PEG-2 Hydrogenated Tallow Amine  
PEG-3 Lauramide  
PEG-2 Lauramine  
PEG-3 Lauramine Oxide  
PEG-3 Oleamide  
PEG-2 Oleamine  
PEG-2 Soyamine  
PEG-2 Stearamine  
Potassium Dihydroxyethyl Cocamine Oxide Phosphate  
Ricinoleamide DEA  
Ricinoleamide MEA  
Ricinoleamide MIPA  
Ricinoleamidopropyl Betaine  
Sesamide DEA  
Sesamidopropylamine Oxide  
Sesamidopropyl Betaine  
Sodium Borageamidopropyl PG-Dimonium Chloride Phosphate  
Sodium C8-10 Alkyl Sulfate  
Sodium Caproamphoacetate  
Sodium Caproamphohydroxypropylsulfonate  
Sodium Caproamphopropionate  
Sodium Capryloamphoacetate  
Sodium Capryloamphohydroxypropylsulfonate  
Sodium Capryloamphopropionate  
Sodium Cocoamphoacetate  
Sodium Cocoamphohydroxypropylsulfonate  
Sodium Cocoamphopropionate  
Sodium Coco PG-Dimonium Chloride Phosphate  
Sodium Cornamphopropionate  
Sodium Decyl Sulfate  
Sodium Isostearamphoacetate  
Sodium Isostearamphopropionate  
Sodium Lauraminopropionate  
Sodium Lauriminodipropionate  
Sodium Lauroamphoacetate  
Sodium Lauroamphohydroxypropylsulfonate

## Surfactants - Hydrotropes

Sodium Lauroampho PG-Acetate Phosphate  
Sodium Lauroamphopropionate  
Sodium/MEA Laureth-2 Sulfosuccinate  
Sodium Myristoamphoacetate  
Sodium Oleoamphoacetate  
Sodium Oleoamphohydroxypropylsulfonate  
Sodium Oleoamphopropionate  
Sodium Ricinoleoamphoacetate  
Sodium Stearoamphoacetate  
Sodium Stearoamphohydroxypropylsulfonate  
Sodium Stearoamphopropionate  
Sodium Tallamphopropionate  
Sodium Tallowamphoacetate  
Sodium Tallowate  
Sodium Undecylenoamphoacetate  
Sodium Undecylenoamphopropionate  
Sodium Wheat Germamphoacetate  
Soyamide DEA  
Soyamidopropylamine Oxide  
Soyamidopropyl Betaine  
Stearamide AMP  
Stearamide DEA  
Stearamide DEA-Distearate  
Stearamide DIBA-Stearate  
Stearamide MEA  
Stearamide MEA-Stearate  
Stearamide MIPA  
Stearamidopropylamine Oxide  
Stearamidopropyl Betaine  
Stearamine Oxide  
Stearyl Alcohol  
Stearyl Betaine  
Tallamide DEA  
Tallowamide DEA  
Tallowamide MEA  
Tallowamidopropylamine Oxide  
Tallowamidopropyl Betaine  
Tallowamidopropyl Hydroxysultaine  
Tallowamine Oxide  
Tallow Betaine  
TEA-Lauraminopropionate  
TEA-Myristaminopropionate  
Trideceth-2 Carboxamide MEA  
Trisodium Lauroampho PG-Acetate Chloride Phosphate  
Undecylenamide DEA  
Undecylenamide MEA  
Undecylenamidopropylamine Oxide  
Undecylenamidopropyl Betaine  
Wheat Germamide DEA  
Wheat Germamidopropylamine Oxide  
Wheat Germamidopropyl Betaine

## Surfactants - Hydrotropes

Surfactant - Hydrotropes are surfactants which have the ability to enhance the water solubility of another surfactant. Prominent members of this group are short chain alkyl aryl sulfonates, sulfosuccinates, and some nonionic surfactants.

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